ARCHAEOLOGIA:

OR

MISCELLANEOUS TRACTS

RELATING TO

ANTIQUITY.

PUBLISHED BY

THE SOCIETY OF ANTIQUARIES OF LONDON.

VOLUME VI.

LONDON,
Printed by J. Nichols, Printer to the Society;
and sold at their Apartments in Somerset Place; and by Messieurs
White, Robson, Leigh and Sotheby, and Brown.
MDCCLXXXII.

CONTENTS.

VII. *Remarks*

XIX. *Account*

ARCHAE-

Boyce del et Sc.

Penates found at Exeter.

ARCHAEOLOGIA:

OR,

MISCELLANEOUS TRACTS, &c.

I. *Account of ſome* Roman *Antiquities diſcovered at* Exeter. *By the* Preſident.

Read Feb. 11, 1779.

GENTLEMEN,

I HAVE the honour to lay before the Society ſome elegant Roman Penates in bronze, which were diſcovered laſt July in digging a cellar under the houſe of Mr. Upham, ſituated in the High ſtreet at Exeter, at the corner of Broad-gate, which leads from that ſtreet to the Cloſe of the Cathedral Church. They were found within a very narrow ſpace, and not more than three or four feet below the preſent pavement of the ſtreet.

THEY conſiſt of five figures, all of them executed in a taſte far ſuperior to the generality of ſtatues found in Britain; it is

 therefore

therefore reaſonable to conclude that they were the workmanſhip of foreign artiſts and of an early period.

THE firſt a female figure [*a*], four inches and half high, is dreſſed in a long looſe garment covering her whole body: her hair is adorned with a diadem like thoſe which appear on the heads of Livia and Trajan's Queens; her hair, tyed behind, falls down her back. Her left hand is broken off; in her right ſhe holds a cornucopia of fruit. The ſharpneſs and folds of her drapery are ſo corroded with ruſt, that they exhibit very faint traces of the original elegant workmanſhip.

ON comparing this figure with thoſe repreſented in Montfaucon's Collection [*b*], one of the Goddeſs Ceres appears perfectly correſpondent to this ſtatue both in the head-dreſs and drapery; ſhe has alſo a cornucopia, but holds it in her left hand, her right having a bunch of poppies; both theſe being emblems of that Goddeſs.

BUT the ſame volume exhibits a ſtatue and ſome figures on the reverſe of medals, repreſenting the Goddeſs Fortune in the ſame dreſs, and with a cornucopia in her right hand. In fact, this emblem is too equivocal to determine the character of this ſtatue. For there is hardly a virtue repreſented on the Roman medals in the character of a Goddeſs which does not bear the cornucopia, to repreſent the plenty which is the attendant or effect of that particular virtue. It appears with the figures of Salus, Pax, Concordia, Hilaritas, Liberalitas, Fœlicitas, Æquitas, Æternitas, and Moneta. The countries of Italy, Africa, and the city of Alexandria, bear it on account of their fertility. But in almoſt all theſe figures we find the cornucopia placed in the left hand, poſſibly becauſe the grace of the figure depending on the attitude of the right arm; the moſt diſtinguiſhed emblem, or that which admitted the moſt graceful extenſion of that arm,

[*a*] Fig. 1. in the plate. [*b*] Suppl. tom. I. pl. LXXIII. fig. 5.

was

was generally placed in it; but the form and ſize of the cornucopia ſeemed to require that it ſhould be placed cloſe to the ſide, and therefore was put in the left arm.

Two ſtatues of Mercury, one four inches and a half long, the other only four inches and a quarter, were found at the ſame time and place. The former [*c*] is a perfect and well proportioned figure; inſtead of a bonnet, or Petaſus, the wings on his head grow out between his hair, as they do in ſome ſtatues repreſented by Montfaucon, and he has no wings on his feet. A long looſe garment, doubled on his left ſhoulder, paſſing under the upper part of the arm is brought over it below the elbow, and hangs halfway down his leg. His right hand, though turned upward, as if meant to contain ſomething, is empty; his left holds a purſe.

This figure bears the greateſt reſemblance to a ſtatue of Mercury repreſented by Montfaucon [*d*], as well in the attitude and form of the purſe, in the wings on the head, and the want of them on the feet, as in the ſize and folds of the garment, which is there doubled on the oppoſite ſhoulder.

The other ſtatue of Mercury [*e*] has the Petaſus, and wings on his feet: he is more clothed than the former figure, his garment entirely covering his right arm and ſide, and reaching down almoſt to his feet. His left hand is in a ſimilar attitude, but the ſhape of the purſe in his right hand is different; there are ſtatues of Mercury in Montfaucon reſembling this figure alſo. That marked N° 5 in the laſt mentioned plate is without his petaſus, but has wings on his feet, and a purſe of the ſame form. The figures N° 1, 2, and 4, in the following plate, are alſo ſimilar; the left hand is generally empty. This ſecond figure of Mercury has ſuffered both in the limbs and drapery by the

[*c*] Fig. 2. in the plate.
[*d*] Tom. I. pl. LXVIII. fig. 3.
[*e*] Fig. 3.

moiſtneſs of the earth in which it has lain, but is not without original merit. There were various methods of repreſenting this Deity, ſome of thoſe in Montfaucon exhibiting him with, and others without wings to his feet. The bronze cock found with theſe Penates is juſtly ſuppoſed to have belonged to one of theſe ſtatues, as it denoted vigilance, and is repreſented as an emblem of Mercury in three or four gems engraved in the ſame volume of Montfaucon. There was alſo a ſquare and a round braſs pedeſtal accompanying theſe ſtatues, and ſuch we find repreſented under the ſtatues of Mercury in the forementioned plate of Montfaucon.

THE fourth figure [*f*], two inches and half high, repreſents either Mars or a Roman warrior, compleatly armed with a high-creſted helmet, coat of mail, and boots covering the whole front of the leg. The right arm erect probably held a ſword, and the left a ſhield, but both are truncated at the hands.

THE laſt and moſt elegant of theſe figures [*g*] is only two inches and a quarter in heighth. From the delicacy of its make, the turn of countenance, and the dreſs of the hair, it ſeems applicable only to Apollo, for it is undoubtedly a male figure. The right hand is broken off at the elbow; the left holds ſomething like a linen cloth, but ſo covered with ruſt that it is impoſſible to aſcertain its form.

THESE five Penates were found with, or rather ſurrounded by a conſiderable quantity of large oyſter-ſhells, which from their ſize and form are known to come from a village on the ſea ſhore, called Budleigh, twelve miles S. E. of Exeter. There were alſo in the ſame maſs various fragments of urns, of different forms, ſizes, colours, and kinds of earth; ſome of a dark brown, and others of a bright red; the latter in particular very highly glaſed, and much adorned with fancied borders and hu-

[*f*] Fig. 4. [*g*] Fig. 5.

man

man figures executed in a very elegant taſte. But the havock made in theſe urns muſt not be attributed to the workmen who were employed in digging the cellar; for the ſpace wherein they were confined, and the manner in which they were dug up, prove that the confuſion had been made at ſome former period; and Mr. Upham, the owner of the houſe, was too attentive to their work after the firſt appearance of the ſtatues, to ſuffer them to proceed without a conſtant inſpection: he cauſed them to continue their ſearch, and diſcovering a large Roman tile, expected to find it the covering of a Roman urn, but to his great diſappointment found it lay only on the natural earth; which certainly was not its original poſition; but it muſt have been thrown there together with theſe broken urns; which then lay included within a ſpace too narrow to have contained them if they had been entire. It is alſo remarkable that no medal or coin of any kind was found with them, though the owner cauſed the rubbiſh to be carefully examined and ſifted. But on the oppoſite ſide of the ſtreet, when the foundations of Mr. Dennis's houſe were dug two years ago, ſome ſmall remains of a teſſelated pavement were diſcovered, with a few Roman medals, one of them a Trajan in large braſs.

Together with theſe antiquities were alſo found ſome fragments of horns, bones, teeth, cinders of glaſs and metal, and ſome quantities of burnt wood, of all which ſpecimens are here exhibited for the inſpection of the Society.

I am, Gentlemen, &c.

JER. MILLES.

Harley Street,
Feb. 10, 1779.

II. *Remarks on the Reverend Mr.* William Harris's *Obſervations on the* Roman *Antiquities in* Monmouthſhire *and the neighbouring Counties of* Wales; *with an Account of ſome curious Remains of Antiquity in* Glamorganſhire. *Addreſt to the Preſident, Council, and Fellows of the* Society of Antiquaries, *by* John Strange, *Eſq.* F.R.S. F.S.A. *His Majeſty's Reſident at* Venice.

Read Jan. 28, 1779.

I DID myſelf the honor, ſome time ago, to ſubmit to the judgment of this moſt reſpectable Society the reſult of my antiquarian reſearches in Monmouthſhire. It has ſince been an agreeable ſurprize to me, to find the ſame ſubject treated by the Reverend Mr. William Harris, in his obſervations on the *Julia Strata*, and other Roman remains in South Wales, inſerted in the ſecond volume of the *Archaeologia*, ſince this Gentleman's obſervations ſeem to confirm the principles, which I ventured to adopt in regard to the Romans in Wales, by additional proofs, not only reſpecting Monmouthſhire and Brecknockſhire, but with regard alſo to the other neighbouring Welſh counties. As the peruſal of Mr. Harris's Paper has given me occaſion to make ſome particular remarks, I think proper to communicate them to the Society, as a ſupplement to my former

Eſſays, and a further illuſtration of this curious ſubject. I ſhall alſo add ſuch antiquarian obſervations as I was able to make in my tour through the neighbouring county of Glamorgan.

In my journey to Wales, I croſſed the Severn at Purton paſſage, and conſequently had not an opportunity to obſerve the *Trajectus Auguſtæ*, from whence *Auſt* paſſage was probably named, and the remains of the Roman camp at Sudbrook. Mr. Harris fortunately ſupplies this deficiency, and, by his judicious obſervations, though contrary to the common opinion, makes it very probable, that the *Trajectus Auguſtæ* croſſed the Severn obliquely, from about three miles below Oldbury in Glouceſterſhire, to Charſton, or the black rock, which is three miles lower down the river, on the oppoſite ſide, at, or near, the landing place of the new ferry. Mr. Harris aſſerts, that the Roman camp at Sudbrook was originally ſquare; which does not agree with the account given of it by Dr. Holland, in his notes upon Sudbrook, as I before obſerved [*a*]. But however that may be, the difference of opinion is eaſily accountable, if we conſider the continual devaſtation, to which this camp has ever been expoſed, by the waſhings of the Severn. Speaking of the remains at Caerwent, Mr. Harris is of opinion, that the old walls ſeen there are of Saxon origin, though he obſerves, that they have frequently Roman bricks interſperſed among them; eſpecially the wall on the ſouth ſide of the camp. To confeſs the truth, I did not obſerve theſe bricks; and conſidered the remains of the ſtone walls at Caerwent as Roman, from the perfect ſimilitude of their ſtructure with other ſuch walls avowedly of Roman origin, and which are not uncommon with us, eſpecially in the northern ſtations *per lineam valli*, and elſewhere. In regard to the particular ſtructure of theſe walls, I ſhall only

[*a*] Account of Monmouthſhire.

add,

add, that Mr. Harris himſelf tacitly admits, that the remains of the ſtone wall at *the Gaer* near Brecknock are Roman; and I before obſerved, that theſe remains are exactly ſimilar, in their ſtructure, to thoſe of Caerwent. The ſame is alſo obſervable of the old walls of the Roman Camp at *Cwm*, near Llandrindod, in Radnorſhire [*b*], and in thoſe of *Segontium* near Carnarvon, in North Wales. If theſe remains, therefore, are to be admitted as Roman, of which, I think, there can be little doubt, for the reaſons before mentioned, why are not the old walls at Caerwent to be equally conſidered of Roman origin, ſince they perfectly reſemble them? For ſuppoſing them Saxon, we may with equal reaſon conſider as ſuch all ſimilar remains, that are found in the different Roman camps throughout the iſland; which I preſume can hardly be allowed. If any reaſonable difficulty might be raiſed againſt the Roman origin of the old walls of Caerwent, I ſhould imagine it muſt be about the South wall only, where the towers are; concerning which I muſt confeſs not to have been without my doubts. But the weſtern wall, where no ſuch towers are ſeen, appeared to me indiſputably Roman; and, I believe, the moſt conſiderable remain of the kind throughout the principality.

MR. HARRIS, in his particular remarks on the *Julia Strata*, which paſſed through this country, makes it begin at Caerwent only; whereas I ſhould imagine it to have begun at the landing place at Sudbrook camp; eſpecially as there appear to be ſome veſtiges of a Roman cauſeway on that ſide of Caerwent, near Creek, as I before obſerved in my account of Monmouthſhire. Beſides, as the diſtance from Sudbrook to Caerwent, *a Trajectu ad Ventam*, is formally ſettled by the Itineraries, being 9. m. p. according to *Antoninus*, we may reaſonably preſume, that

[*b*] Archaeologia, vol. I. p. 302.

ſome

ſome Roman road led that way, and why not the *Julia Strata*, conſidering the importance of ſuch a communication with the eaſtern road and Roman ſtations on that ſide of the Severn? Mr. Harris ſuppoſes, that the *Julia Strata* led over the ſmall river Throggy, about a quarter of a mile due weſt towards Carleon, but not in a ſtrait line. But from the courſe of the country, as well as from Mr. Lethieullier's remark, and actual veſtiges of this road, eſpecially the *dorſum elatum*, lying in a direct line at right angles through the camp at Caerwent, it is to be preſumed that the road continued ſtrait; as Mr. Harris obſerves it does over Stallingdon Down near Cowbridge. Indeed, the Roman roads are known ſo to do generally; unleſs prevented by ſome unſurmountable natural difficulty, which does not occur to me in the preſent caſe, from my recollection of moſt parts of the country in queſtion, which, on the contrary, ſeems rather adapted particularly for a ſtrait road. Perhaps a ſide road might lead, from the main one, down to Caerleon, to the weſt of the camp at Caerwent, and probably might not much differ from the preſent road; ſince the immediate northern deſcent from the camp into the valley, is too ſteep to ſuppoſe it to have had that direction; beſides the neceſſity of its courſe weſtward, and the actual veſtiges of it before mentioned. But this point alſo muſt be determined by further obſervations, which probably will not be wanting. For though Mr. Harris pretends that the *Strata Julia* is not to be traced like other Roman roads, by a bank thrown up, or pavements, or cauſeways, yet ſome veſtiges of this kind certainly remain. Beſides, Mr. Harris himſelf ſays, that, at the weſt end of Stalling down, half a mile eaſt of Cowbridge, you may ſee this road running in a ſtrait, broad line, on the eminencies it paſſes over, ſeven computed miles, and terminating in Newton down; which is ſurely a ta-

cit acknowledgement, that ſome work of art is at leaſt diſcernible. The Roman urns, containing aſhes and coins of the lower Empire, found at *Lanvair is Coed*, near Caerwent, is a further addition to the diſcoveries in theſe parts, and for which we are alſo indebted to the care of Mr. Harris. I ſhall now proceed to conſider this Gentleman's obſervations on the famous neighbouring ſtation of *Iſca Silurum*, or old Carleon.

MODERN Carleon, according to Mr. Harris, lies more to the eaſt, than *Iſca Silurum* did, though he obſerves, that it occupies part of the antient city, and perhaps its eaſtern ſuburbs. On tracing the old walls, of which the foundations in many places ſtill remain, at leaſt ſufficiently to aſcertain their directions, it appeared to me, that a great, and, indeed, the principal part of the preſent Caerleon is ſituated within them; the weſtern wall being juſt without the town; thoſe to the north and eaſt ſides paſſing through the ſkirts of it; while the river bounds it to the ſouthward. Mr. Harris, however, conſiders theſe walls alſo as Saxon; obſerving only, that Roman bricks are ſeen in them, as in the walls of Caerwent. I muſt here again confeſs, that theſe bricks did not occur to me, and I have already given my reaſons, why I think the walls themſelves of Roman origin [*e*]. Mr. Harris further obſerves, that old Carleon ſeems to have extended weſt of the modern town, and over the river Uſk, beyond the houſe of St. Julian, which had lately been converted into a farm houſe. Upon this occaſion, as I have ſince been informed, there were found ſome old maſſy iron chains, ſuppoſed to have ſerved to prevent veſſels from entering the town up the river Uſk. The road to this river, on the weſt ſide of the town, alſo abounds with Roman bricks, and various other remains of antiquity; while the name of the pariſh, which is Langattock,

[*e*] Account of Monmouthſhire, Archaeol. vol. V.

i. e.

i. e. *fanum Catoci, juxta* Carleon, ſeemingly confirms this aſſertion. But I am apt to think, that moſt of the buildings on that ſide were *extra moenia*; as appears, indeed, from the direction of the weſtern wall, of which there are ſtill conſiderable remains above ground. For inſtance, the Amphitheatre, which Mr. Harris has particularly deſcribed, is juſt without this wall; beſides the veſtiges of other public buildings, as baths, ſudatories, &c. &c. In 1755, in a field near the river, weſt of the bridge, was laid open one of theſe bagnios, or ſudatories, in which were ſmoaked bricks, and ſmall pillars of a circular form made of bricks four inches thick, and fourteen inches in diameter, heaped one on the other, like ſo many cheeſes. The ſame kind of round brick pillars, though plaſtered over, has alſo been in uſe in Italy, among the modern architects, particularly Palladio, ſome of whoſe buildings at Venice have ſuch pillars. Mr. Harris likewiſe mentions other diſcoveries near this bath; and alſo ſpeaks of another bath, found in an adjacent field, but which the owner would not ſuffer to be opened. This Gentleman, though more diligent in his inquiries, was not more ſucceſsful than me in his endeavours to diſcover the ſubterranean vaults and caverns near Carleon, mentioned by Dr. Gale [*f*]; though ſuch, however, may perhaps exiſt in the adjacent hills, on the *ultra pontem* ſide, as Mr. Harris ſays the children call it to this day, and where ſcattered ruins are often ſeen.

Among the acquiſitions made by this Gentleman, towards illuſtrating the Roman antiquities of Monmouthſhire, beſides Mr. Hanbury's collection of medals and other curious remains, the antique cornelian ſeal of Ceres, found at Carleon, about the year 1750, is deſervedly eſteemed. But Mr. Harris was not more fortunate than me in making any further diſcoveries of

[*f*] Antoninus's Itinerary, pag. 96.

inſcriptions at Caerleon; though I am perſuaded, that time, and diligent ſearch, may bring others to light; ſince many were formerly found there; and the importance of the place gives juſt reaſon to expect more. About half a mile to the north ſide of Caerleon, on a hill, Mr. Harris deſcribes the remains of a camp with double ramparts, which he ſuppoſes to have been the *aeſtiva* of the ſecond Legion; and, indeed, there is much greater reaſon for ſuch an opinion, than to ſuppoſe, with Mr. Salmon, that *Venta*, or Caervent, ſerved Carleon in that capacity. Such acceſſory camps, whether deſigned for *aeſtiva* merely, or for ſpeculation and additional ſtrength, as is moſt probable, were generally common to the more important Roman ſtations, eſpecially when ſituated in a plain immediately under hills; in which ſituation, indeed, they became unneceſſary. I obſerved a very perfect camp of this kind on an eminence near *Avanches* in Switzerland, the antient *Aventicum*, which was the principal ſtation of the Romans in that country, and moreover greatly reſembles *Iſca Silurum* in its ſituation. Other ſimilar Roman camps are alſo obſervable in Switzerland. The moſt remarkable one that occurred to me in my tour of that country, was on the ſummit of one of the higheſt mountains in the Canton of Appenzell, and which intirely commanded a vaſt tract of the vale of the upper Rhine, above the lake of Conſtance, between the Swiſs and the Griſon Alps. We are indebted to Mr. Harris for the diſcovery of the camp called *Craig y Gaekkig* near Uſk, which, from the name, and Roman coins frequently found there, may, perhaps, be preſumed of Roman origin. The curious Britiſh ſepulchral inſcription, formerly illuſtrated by Dr. Wotton, and of which Mr. Harris ſeems to have given us a very exact copy, is a further ſtrong proof of the long reſidence of the Romans in theſe parts, from the manifeſt corruption of the language of it, by that dialect. But when this Gentleman

asserted,

aſſerted, that no traces of Roman antiquities were ever ſeen, or heard of in the memory of man, at Abergavenny, univerſally allowed to be *Gobannium* of the Itinerary, he forgot the *balneum*, or ſudatory, particularly mentioned by the learned Mr. Horſley in his *Britannia Romana*; though few, if any, certain veſtiges of ſuch a building ſeem to remain there at preſent, as I obſerved in my former account. We are indebted to Mr. Harris for ſome further illuſtration of the *Gaer* near Brecknock, which he juſtly conſiders as a Roman ſtation, and would fix *Magnis* there, for the ſame reaſon that inclined me to fix it at *Cwm* in Radnorſhire, with which newly diſcovered ſtation, perhaps, this gentleman was not acquainted. He further mentions the diſcovery of a number of Roman coins at *Devynnog*, only three miles diſtant from the *Gaer*; and alſo near Old Caſtle, at the northern extremity of Monmouthſhire, under the Hatteral hills, or *black mountain*, as it is called; where Dr. Gale would fix *Bleſium* of Antoninus; and near which, on Campſton hill, Mr. Harris likewiſe obſerved a large camp.

On conſidering theſe authorities, the name of Old Caſtle, and particularly the mountainous, remote, and unfrequented ſituation of that part of the country, it occurred to me, that there might very poſſibly ſtill exiſt ſome further remains of Roman antiquity, at leaſt in the neighbourhood. I therefore wrote to Mr. Hay, whoſe uſual abode at Brecknock is not very diſtant from Old Caſtle, deſiring him to favor me with ſuch information as he could procure on the ſubject. He accordingly ſoon after acquainted me, that although there be at preſent ſcarce any viſible remains preciſely at Old Caſtle, yet that, a few years ago, as he was credibly informed, ſome conſiderable veſtiges of a teſſelated Roman pavement were alſo found at a place called *Coredgravel*, which is above two miles to the north of Old Caſtle. This diſcovery, though it does not ſufficiently confirm Dr. Gale's opinion,

opinion, in fixing *Bleſtium* of Antoninus in that part of the country, yet it ſeems ſtrongly to argue ſome temporary ſettlement of the Romans there; eſpecially ſuppoſing the neighbouring camp obſerved by Mr. Harris to be of Roman origin, as I conclude he took it to be, not mentioning otherwiſe, and as, indeed, it probably may be. From the elevated and advantageous ſituation of this ſpot, which commands a moſt extenſive view ſouthward, and towards the eaſt and weſt, particularly over the adjacent parts of Herefordſhire and Monmouthſhire, there is all the reaſon to ſuppoſe, that the Romans had, at leaſt, an exploratory, or ſummer camp there. It is further well known, that a part of the Roman luxury was to carry *teſſeræ* with them on the removal of their armies, to ornament at leaſt the *prætorium* of their general, which they might thus eaſily do, even in the moſt tranſitory ſtations. Another obſervation that occurs to me in regard to the preſent ſubject, is, that as there avowedly were many Roman ſtations in the three contiguous counties of Hereford, Monmouth and Brecknock, and as *the black mountain* occupies a very conſiderable tract on their confines, extending about twenty miles in length, if I miſtake not, from eaſt to weſt nearly, it is hardly to be preſumed, but that the Romans had ſtations there; and, of courſe, communications over the country. But this tract is ſeldom viſited but by ſportſmen and ſhepherds, and is therefore little known; though it would probably afford important diſcoveries, in the antiquarian way, to a curious and intelligent obſerver, who has the advantage of reſiding in its neighbourhood; ſuch a tract of deſert mountain being ill calculated for the curſory reſearches of a traveller.

THOUGH there are few viſible certain remains of Roman antiquities in Glamorganſhire, yet the eſtabliſhment of the Romans in that, as well as in the neighbouring counties before mentioned, ſeems not eaſily to be diſputed. And, indeed, if the opinion of

of the oldeſt antiquaries is abſolutely to be taken, theſe ancient maſters of the known weſtern world had more ſettlements in this county than in any other throughout the principality. Baxter has fixed *Jupapania*, the *Jupania* of the monk of Ravenna, at Caerdiff; which ſtill retains the generally received mark of its Roman origin in the monoſyllable *Caer*. *Ratoſtabius* alſo, as Baxter obſerves, is acknowledged in the Tave that waſhes Caerdiff. And as either Somner, or Lambard, I forget which, traces the Romans in Rumney, or Romney, in Kent; ſo other etymologiſts might, perhaps, derive the name of the neighbouring river Rumney, or Rhemny, as the Welſh call it, that divides Glamorganſhire from Monmouthſhire, from the ſame origin. But here a difficulty would occur in the ſignification of the Britiſh word *Rhemny*, which implying to divide, as Camden obſerves, ſeems to account for the etymology upon a more natural principle. Cowbridge is ſuppoſed to be the *Punctuobice* of the monk of Ravenna, or *Pontuobice*, according to Dr. Gale [g], who alſo traces the etymology in the modern name of the town. *Bovium*, or *ad latus*, which all antiquaries confine to Glamorganſhire, is by Camden placed at Cowbridge, probably from the analogous ſignification of the two names; but other antiquaries, with more apparent reaſon, fix it at Boverton, a few miles ſouth of Cowbridge, near the ſea coaſt, and where Roman coins have frequently been found. The ſimilitude of the ancient and modern names, and the appellation *ad latus*, which, probably, was only additional, *Bovium ad latus*, i. e. *ad latus maris*, ſeems ſtrongly to confirm this opinion. From the many ruins I obſerved about there, Boverton ſeems alſo formerly to have been a much more conſiderable place. Mr. Harris fixes *Bovium* at Lantwit Major, between Cowbridge and Boverton; on account

[g] Anton. Itin. pag. 125.

of

of the ruinous condition, and apparent antiquity of that place. But, by the ſame argument, he might have ſettled it at other neighbouring places in this county; nor is there any proof in favor of Lantwit Major, the antiquities of which, however curious, being of much later date than the Roman times, as I ſhall have occaſion to obſerve hereafter. Some antiquaries have alſo fixed *Bulaeum Silurum* of Ptolemy at Caerphilly; probably either on account of the name, or the immenſe fabrick of the caſtle there, and the ſilence of hiſtory in regard of its origin. But neither are there here any real proofs of a Roman origin; which opinion my learned friend the honourable Mr. Daines Barrington ſeems alſo to have ſufficiently confuted in an expreſs and curious treatiſe on the ſubject; and I have alſo offered my conjectures in a former paper about placing *Bulaeum Silurum* elſewhere [*b*]. Glamorganſhire may, however, boaſt of other Roman ſtations, beſides thoſe already mentioned, and ſeemingly on good authority. Though Horſley [*i*] ſays we muſt look for *Nidus*, as he calls it, meaning *Nidum* of Antoninus, at the mouth of the river Avon in Somerſetſhire, yet Neath in Glamorganſhire is by all other antiquaries allowed to be *Nidum*, the foundations of which, ſays Burton, ſtill ſhow themſelves. The ancient and modern name have alſo the ſame ſignification in the reſpective languages. *Leucarum* of Antoninus is alſo generally admitted to be the preſent Loghor, or Lwgher, of eaſy Roman derivation, if ſuch arguments are to be deemed concluſive [*k*]. Without admitting *Bulaeum Silurum* in Glamorganſhire, or making two ſeparate places of *Bovium* and *ad latus*, as ſome might do, we have, according to the teſtimony of the beſt antiquaries, no leſs than five diſtinct Roman ſtations in this

[*b*] Account of Brecknockſhire, Archaeol. vol. I. p. 278.
[*i*] Britan. Roman. B. III. Ch. ii. pag. 465.
[*k*] Baxter, Gleſſ. in voc.

county, notwithſtanding the ſmall extent of the habitable part of it, and the conſequent neceſſity of fixing thoſe ſtations very near each other. Glamorganſhire alſo proportionally abounds more than any other Welſh county with acceſſary or ſubordinate Roman camps, whether exploratory, eſtival, or otherwiſe. Of theſe the camp at *Caireu*, about two miles from Caerdiff, which an etymologiſt would ſtamp for Roman unſeen, is the moſt remarkable, being large and very intire. It is particularly deſcribed by Mr. Harris, who takes notice likewiſe of two other ſmaller Roman camps in the ſame neighbourhood. He further mentions the camps near Ewenny, and in Tredegar Park, apparently Roman; and alſo deſcribes ſome croſs Roman roads, that join the *Julia* ſtrata in this county. But theſe particulars, eſpecially the laſt, merit a more diligent inquiry, which thoſe alone, who are reſident on the ſpot, can conveniently attend to. Notwithſtanding the concurrent teſtimony of the moſt reputed antiquaries in ſettling the before mentioned Roman ſtations in Glamorganſhire, very few certain and viſible remains of Roman antiquities are, I believe, now to be found about thoſe places, or indeed throughout the county. Scarce any occurred to me on the curſory view I took of them. The ſuppoſed Roman foundations at Neath, mentioned by Burton, ſeemed to me rather doubtful. The ſtone inſcribed POMPEIVS CARANTOPIVS, which is taken notice of by Lhwyd in his additions to Camden, is ſtill, however, remaining between Kemſig and Margam; and, if certainly Roman, as it appears to be, is, perhaps, the only antiquity of that kind extant in the county. Roman coins have indeed frequently been found in different parts of Glamorganſhire, as well as in the other Welſh counties; particularly about Cowbridge and Boverton; and though theſe are rather doubtful, or, at beſt, only acceſſary teſtimonies of a ſtation, yet they are ſurely ſtrong proofs of ſome reſidence of the

Romans in the countries in which they are found in plenty. Mr. John Morgan, who repreſents the county of Monmouth, and manifeſts a moſt laudable zeal in the preſervation of the antiquities of his country, not long ſince obligingly informed me of ſeveral Roman coins found in an old lead mine, ſuppoſed to have been worked by the Romans, on a hill called *Keſn-Pwll-du*, about a mile north of the beautiful family ſeat of the Morgans at Ruperra in Caerdiff hundred. Among theſe, Mr. Morgan particularly mentions the two following:

1. IMP. CAES. DOMIT. AVG. GERM. P. M. TR. P. P.
IMP. XXI. COS. XV. CENS. P. P.

2. *IMP. NERO* CAESAR AVG. TR. P.
P. M
IVPI*TER*. CVSTOS

This Gentleman favored me at the ſame time with the annexed copy [*l*] of a drawing, found among his father's papers, of a Roman veſſel accidentally diſcovered, about thirty years ago, by ſome people at plough, in a field called *the Warren*, at Therrow, his country ſeat, in Brecknockſhire. The workmen ſaid there were many of theſe veſſels; that they ſtood in pigeon holes, one in each; but that they covered them all again, except one, from which the drawing was made, and which has ſince been unfortunately loſt. As the curious obſervers of antiquity conſider even theſe inferior objects as well worthy of their notice and illuſtration, of which the printed collections of the late celebrated Count Caylus afford a particular example; it is to be preſumed, that an account of any ſuch found in theſe remote parts will not be deemed ſuperfluous. Mr. Hay of Brecknock, who has alſo lately viſited this ſpot, further informs me, that, at Trebariod, little diſtant from it, he alſo ſaw an antique

[*l*] Plate III. Fig. 1.

ſquare

ſquare pipe of earth, like white brick, ſaid to be found in the ſame neighbourhood, about ſixteen inches long, and nine ſquare, and about an inch thick. The inſide ſeemed as if made with the hand, and the outſide moulded, with the corners blunted. It appeared to be very well burnt, and probably belonged to ſome Roman conduit or water pipe. These anecdotes, however ſlight, ſufficiently ſhow, how reaſonably we might expect, in thoſe parts, other diſcoveries of the like nature, if the ſame curioſity was more generally excited among the Gentlemen who reſide there. Having nothing further to offer at preſent relating to any actual remains of Roman antiquities in Glamorganſhire, which may nevertheleſs very probably occur to more diligent inquiries, I ſhall beg leave to make a few general obſervations, tending, however, to confirm the opinion of the eſtabliſhment of the Romans in that county preferably, perhaps, to any other throughout the principality.

First, the neceſſary and moſt convenient communication, which the lower maritime part of Glamorganſhire afforded between the more weſtern provinces of the *Demetae*, particularly *Maridunum*, the capital, and the ſouthern, and moſt important part of the iſland, of courſe obliged the Romans to have ſome ſettlements there; and the goodneſs of the ſoil and climate, added to the convenient ſituation, and beauty of the country, might well enough encourage them afterwards to increaſe thoſe ſettlements. I ſhall not dwell upon other natural and oeconomical advantages with which this country alſo abounds in its different mines &c. as is well known. A ſufficient proof of the mildneſs of the climate, is, that myrtle hedges flouriſh in the gardens at Caerdiff in open air, and in the greateſt vigour. The neighbourhood of the ſea, and a chain of high mountains that flank Glamorganſhire to the north by a gradual elevation, give this country every deſirable local advantage; *ea poſitione quam*

optimam judicavit CATO, *et ob quam Italiam tantopere commendat* PLINIUS; perfectly corresponding also with that situation which Vitruvius recommends as the most eligible. I visited *from hence*, across a hilly country, the famous Caerphilly Castle, situated, at the distance of a few miles only, in a small plain surrounded by hills, somewhat resembling the situation of Caerleon, and covering a very considerable extent of ground. Nothing but the immensity of the building, I believe, could have induced any one, as it seems greatly to have inclined even Camden himself, to give this castle a Roman origin, of which, as I before observed, there are no real proofs; neither could I learn, that any Roman coins, or other marks of that people, were ever found there. However, Mr. John Morgan obligingly communicated to me some old and very curious characters [*m*], which, as he informed me, by letter dated Tredegar, 22d October 1769, he copied some time before from the front of some stones, which, as he imagined, formerly supported the beams in a room of this castle. But to return to my general remarks.

FROM what has been before said, it will, I presume, appear reasonable enough to suppose, that the Romans may have really shown some predilection for a province so convenient to them, and so richly favoured by nature as Glamorganshire; and that, therefore, the concurrent testimony of the most reputed Antiquaries in establishing so many Roman stations there is not without a plausible foundation. Add to this, that such testimonies have commonly some latent support from traditional authority, which, especially in matters of this kind, has its weight, however obliterated by time the sources may be from whence it flows. Do not also the numerous and magnificent remains of more modern times equally strengthen, by the same example,

[*m*] Plate III. Fig. 2.

such

ſuch an opinion? Beſides Caerphilly Caſtle, what other building, throughout the principality, can match the noble pile at Caerdiff, of which there are ſtill very conſiderable remains, and which, according to the late curious and learned Mr. Lethieullier's account, covered eight acres of ground? Another circumſtance that greatly recommends this fine ruin to the attention of the curious traveller, while it does credit to its noble owner, is, that it is very neatly kept, and in good repair, which is ſeldom the caſe of other ſuch antiquated buildings. It is unneceſſary to mention many other large caſtles and abbeys, in different parts of this county, and the ruins, and other marks of extenſive habitations about Lantwit Major, St. Donat's, Kemſig, and many other places. Upon the ſame principle of ſucceſſive predilection and ſettlement, may we not alſo reaſonably account for the few certain veſtiges of Roman buildings in Glamorganſhire; ſince, as I took occaſion to obſerve in a former paper, no countries are ſo little likely to preſerve ſuch remains as thoſe where population, and conſequently culture, have long prevailed? However, Glamorganſhire certainly wants not its objects for the antiquary, if the more modern, though leſs claſſical, remains of antiquity can engage his attention. The moſt celebrated caſtles and abbeys in this county are already known to the curious, by the accounts given of them by different authors, and more eſpecially from the valuable engravings of Mr. Buck, Mr. Groſe, and others. I ſhall therefore confine myſelf to ſome leſs obvious, though equally curious remains, that fell in my way during my excurſions through this county; and, by my attention to which, I hope, in ſome meaſure, to compenſate for the ill ſucceſs that attended my reſearches after Roman antiquities there. Lantwit Major before mentioned afforded me the principal objects of this kind that excited my curioſity. The ſituation of this place, though rather low, is yet pleaſant enough, being at a little diſtance only from the ſea. Mr. Lethieullier,

thieullier, with a perusal of whose curious manuscript tour of Wales, in 1736, I was favored, as I before mentioned, previous to my journey, by our late worthy and learned President the Lord Bishop of Carlisle, had sufficiently raised my expectations, by his account of that place, famous in ecclesiastical history, says he, for the residence of *Germanus* and *Lupus*, sent there for the extirpation of Heresy. Besides the remains of the celebrated schools, in which so many nobles are supposed to have been educated, and the ruins of many other buildings, there are several streets, as Mr. Lethieullier observes, in different directions, that retain their names, though the houses on each side are destroyed. A large old building still standing is called the Town Hall. Several curious monumental stones and inscriptions are seen in the church and church yard, and figures of a more antique date, says Mr. Lethieullier, than any I ever saw. Mr. Hay of Brecknock, to whose assistance I recommended myself, has since obligingly favored me with the annexed drawings and descriptions of the most curious of these stones, and which I have now the honor to present to the Society. According to this Gentleman's account, the following figures represent the flat stone [*n*] and inscribed carved pillar [*o*] communicated by Mr. Llwyd to bishop Gibson, and inserted in his edition of Camden's Britannia. The former [*p*] representing a grave stone, with a rude inscription on it, which I shall not attempt to decypher, lies on the south side of the church, and Mr. Hay says it is about four feet long; but seems to have been broken. It is reported to have been brought thither from the *great house*, as they call it, and looks as if it had been set with the lower part in the earth. Another square black stone, rudely worked, but without any character on it, also lies by the south door of the church. Mr. Hay here observes, that the chapel dedicated to the blessed Virgin is in ruins; however, in a niche

[*n*] Plate II. Fig. 1. 2. [*o*] Fig. 3. [*p*] Brit. p. 735.

in


Fig. 1.
PRINS + RICHARD
NOPKINS

curious manuſcript tour of
I before mentioned, pre-
orthy and learned Preſident
fficiently raiſed my expecta-
famous in eccleſiaſtical hiſ-
Germanus and *Lupus*, ſent
Beſides the remains of the
many nobles are ſuppoſed to
of many other buildings,
ieullier obſerves, in different
though the houſes on each
ding ſtill ſtanding is called
monumental ſtones and in-
nd church yard, and figures
ethieullier, than any I ever
whoſe aſſiſtance I recom-
ly favored me with the an-
the moſt curious of theſe
honor to preſent to the So-
an's account, the following
nd inſcribed carved pillar [o]
hop Gibſon, and inſerted in
The former [p] repreſenting
on on it, which I ſhall not
uth ſide of the church, and
ong; but ſeems to have been
en brought thither from the
ks as if it had been ſet with
er ſquare black ſtone, rudely
on it, alſo lies by the ſouth
re obſerves, that the chapel
ruins; however, in a niche

3. [p] Brit. p. 735.

in

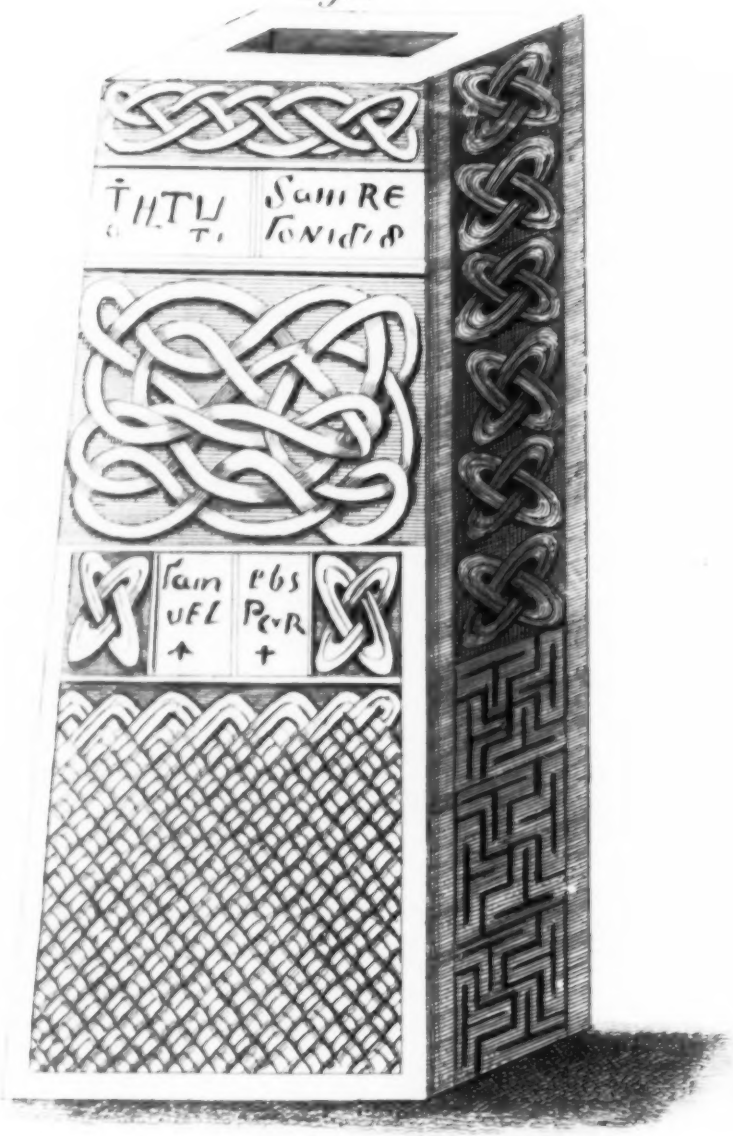


Fig. 3.

Fig. 2.

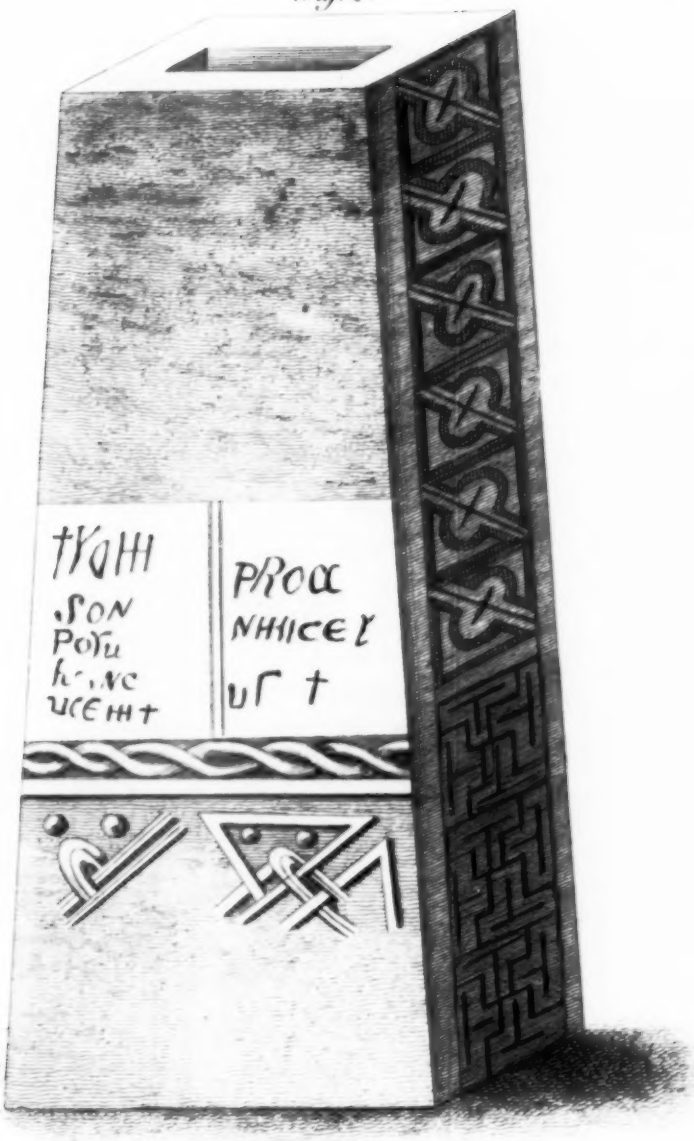


Fig. 1.

Antiquities in S. Wales.

in the eaſt wall there appears the lower part of a ſtatue, and, under the niche, is rudely carved in baſs relief a woman leaning her head on her right hand, in a reclining poſture. Near the altar is alſo another ſmall rude figure, kneeling, and much in the ſame dreſs as the annexed figure [*q*], repreſenting the ſtatue of prince Richard Hopkins. It is finiſhed with two ſmall columns, one on each ſide of the figure, and juſt fits a niche, where ſeemingly a baſon for the holy water alſo was, but which is now ſmeared over with lime. The round carved pillar of ſtone before mentioned ſtands in the church yard, near the northweſt wall of the church, and was alſo taken notice of by Mr. Lethieullier. It is about ſix feet high, and curiouſly worked; having alſo a groove in it, cut longitudinally, and meaſuring about four inches broad, by two inches deep. There is alſo another ſtone in this church yard, about the ſame height, and curiouſly worked nearly in the ſame manner; but of an oblong ſquare form, with a parallel longitudinal opening, or well, in the middle of it. The two annexed drawings [*r*] repreſent diagonal views of the different ſides of this ſtone, on two of which are inſcribed, in ſix ſeparate compartments, the many rude characters obſervable alſo in the drawings, but which I ſhall not, however, attempt to explain. Mr. Lethieullier alſo mentions this ſtone. The next drawing [*s*] repreſents the beforementioned ſtatue of prince Richard Hopkins, according to the inſcribed label annexed to it, with the buſt of a child, cut in high relief near it. This ſtatue is of a whitiſh kind of freeſtone, like Bath ſtone; is a laboured piece; rather in a modern dreſs; and tolerably well finiſhed; but ſeems imperfect at the bottom. It ſtands in a ſmall place behind the altar in Lantwit Major church; but probably was brought thither from ſome other place. To the middle of the ſame church have alſo lately been

[*q*] Plate II. Fig. 4. [*r*] Plate II. Fig. 1. 2. [*s*] Plate II. Fig. 4.

removed

removed the two curious monumental ſtones repreſented by the annexed figures [*t*], and which lie ſide by ſide, though of different pieces and qualities of ſtone. The firſt figure is of a whitiſh kind of freeſtone; and ſeems by the dreſs, to repreſent, ſome eccleſiaſtic, perhaps a biſhop, whoſe head reclines on a cuſhion placed diagonally, while his feet reſt againſt two globes. He holds his gloves in his left hand, while his right lies on his breaſt. The robes are deeply carved, and the figure is nearly in high relief. The rude inſcription [*u*] about it is cut laterally on the thickneſs of the ſtone; as in the other, near it, repreſenting a curious mummy-like figure, cut in a kind of blue limeſtone, and broken near the middle [*x*]. This figure is alſo mentioned by Mr. Lethieullier. I ſhall here take notice, that in Landaff cathedral, the ſituation of which is very low, beſides the many biſhops monuments that are ſeen in it, there is likewiſe obſervable, lying in the church, a curious figure of the ſkeleton of a woman cut in ſtone, and well executed, though now rather defaced.

THE following drawings of other ſingular remains of antiquity, much of the ſame kind, and which are alſo obſervable in different parts of this county, may, perhaps, equally ſeem to merit ſome attention. The firſt [*y*] repreſents a rude figure, about five feet long, and carved in bas relief, on a ſtone projecting from under the ſouth weſt butment of the tower of Llanblyvian church, about a mile from Cowbridge, on the road to Lantwit Major; where formerly were ſeen two caſtles, of one of which there are ſtill conſiderable remains. The next [*z*] drawing is of a curiouſly worked ſtone, alſo inſcribed with a

[*t*] Plate III. Fig. 3. 4.

[*u*] It may be read,

Willbm : de : Rbebllo : gyt : ici : Deu : de : ſa : alme : eyt : merce.

[*x*] The other inſcription is imperfect, but may be thus read,

nepetrac | *lcetur : que : ſubjacet.*
iſlatustur

[*y*] Plate III. Fig. 5. [*z*] Plate III. Fig. 6.

few

Fig. 4.

Fig. 6.

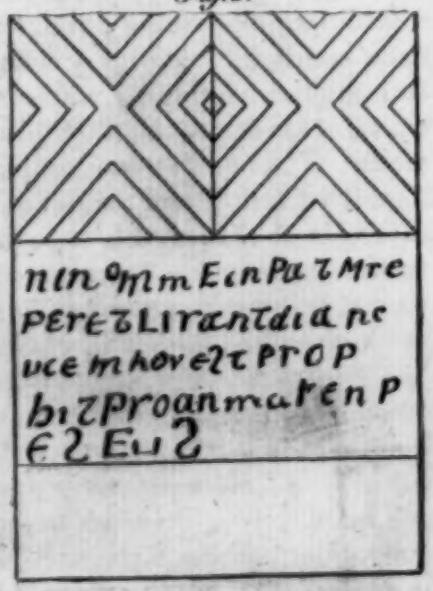


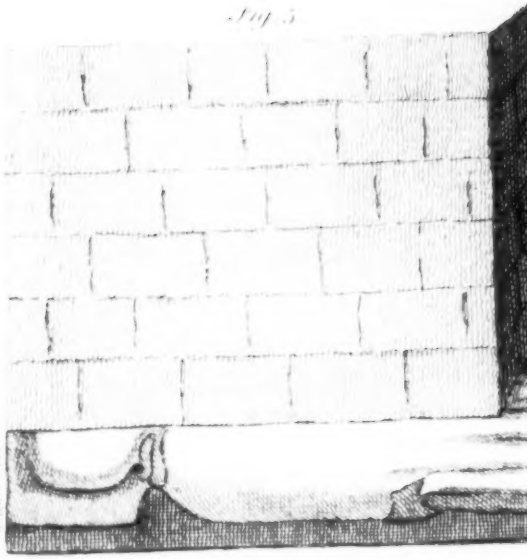
Fig. 1.

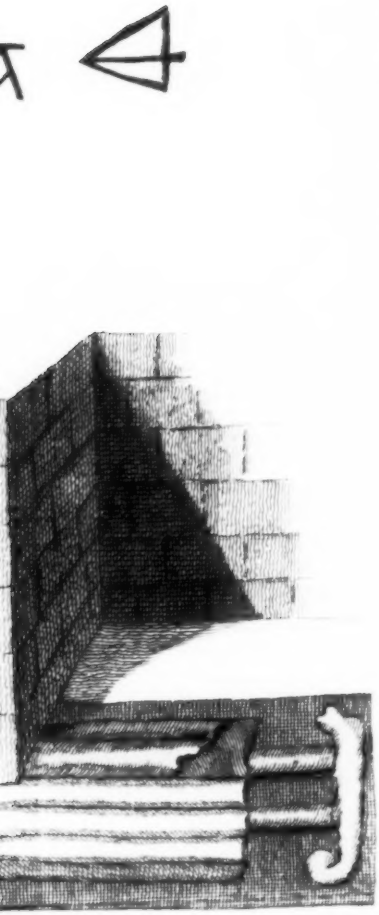
ll ſtone, repreſented by the
ds by ſide, though not dif-
The firſt figure is of a
by the dreſs, to repreſent,
whoſe head reclines on a
et reſt againſt two globes,
while his right lies on his
and the figure is nearly in
about it is cut laterally on
ther, near it, repreſenting a
and of blue limeſtone, and
gure is alſo mentioned by
ne, that in Landaff cathe-
, beſides the many biſhops,
re is likewiſe obſervable,
of the ſkeleton of a woman
igh now rather defaced.
ingular remains of anti-
which are alſo obſervable
, perhaps, equally ſeem to
repreſents a rude figure,
ch, on a ſtone pro-
ment of the tower of
n Cowbridge, on the road
ee ſeen two caſtles, of one
remain. The next [x]
one, alſo inſcribed with a

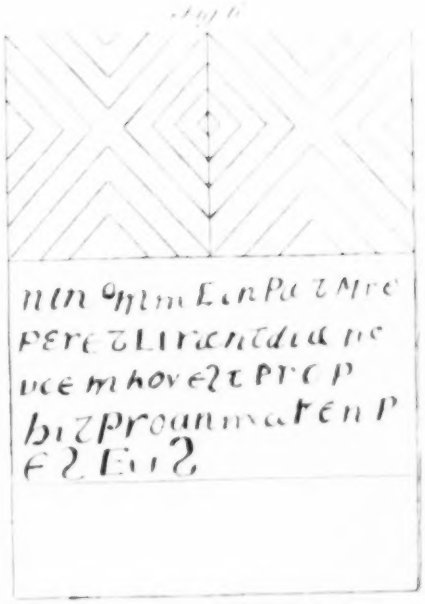
Fig. 1

Fig. 7

Fig. 5







(Integratus in N. Wales)

few rude characters, and which ſerves as a foot bridge before Court-y-David houſe, on the road ſide between Margam and Cowbridge. In the ſame place there is alſo another ſtone, nearly ſimilar; but being reverſed, Mr. Hay, to whom I am alſo obliged for theſe drawings, could not conveniently take the deſign of it. The third [*a*] and laſt drawing alſo repreſents a very curiouſly worked ſtone now ſtanding in Margam village. The wheel, or circular part of it, marked with the croſs, ſtood in the groove, on the top of the ſquare baſe or pedeſtal, which is alſo moſt curiouſly wrought. This baſe is about four feet long by two and a half high, and about two feet thick; and the ſquared ſhaft that projects from the bottom of the wheel is about three feet and a half in diameter, and nineteen inches thick. I muſt not omit here to obſerve, that no lover of Gothic antiquities ſhould paſs Margam without viſiting the elegant circular building, of curious workmanſhip, with a central fluted pillar ſupporting the roof, and which now ſerves as an out office belonging to Mr. Talbot's pleaſant ſeat before mentioned. Mr. Lethieullier obſerves, that this building was formerly a Chapter houſe belonging to an old priory which was at this place.

Having nothing further to offer at preſent in regard to theſe antiquities of the lower times, I ſhall briefly mention ſome other particulars, but chiefly topographical, relating to Glamorganſhire, which were taken partly from Mr. Lethieullier's curious manuſcript before mentioned, and partly from my own obſervation.

Returning from Neath to Cardiff, Mr. Lethieullier left the great road at Newton Down, turning to the right, towards the ſea coaſt, by an eſtate belonging to Lord Brooke, called (Tre-

[*a*] Plate III. Fig. 7.

garthaw) i. e. *a garrison of a hundred hands*; which place, though of note, is not mentioned in any of the maps of this county, that I have seen. Indeed the maps of the Welsh counties in general omit many other places of considerable note, and are very incorrect, particularly about the courses of the rivers, the situations of places, &c. Thus, for instance, in Bowen's map of Glamorganshire, from the source of the small stream Cunnon, in Penderin mountain, to its junction with the river Tave, which is between ten and twelve miles, if I mistake not, and mostly through a cultivated and inhabited valley, there is only the name of the village Aberdawr. Geographers are, indeed, seldom exact in the more remote and mountainous parts of a country; and these, particularly throughout the principality, are very erroneously laid down in all the maps, and greatly need a general and more accurate survey. But I shall not dwell upon these particulars at present. Mr. Lethieullier, on mentioning the deep sands about Tregarthaw for three miles extent, adds, that so much has the sea incroached and driven them thereabouts, that great part of the adjacent country is laid waste, and the house almost buried by them. In another place he also observes, that Kemsig was once a town, though now its ruins are buried in the sands, and the few inhabitants of its lordship are retired to a hill about a mile from the old town. The pool of that name, and which is in Mr. Talbot of Margam's lordship, is about two miles round, and is remarkable for affording very large eels. I also recollect to have observed considerable sand hills, or dunes, like those in Holland, on the neighbouring coast between Margam and Breton Ferry. Other parts of the coast of Glamorganshire are likewise much exposed to the same natural inconvenience; as I particularly remarked in making the tour of Gower hundred, near Oxwich bay, where the shoals of sand are very great, and where the in-

habitants pretend that an entire village had been swallowed up by them. If we consider the situation of the Glamorganshire coast, directly opposite to the violence of the south west winds, and forming a part of a narrow channel, this extraordinary collection of sands about it need not surprise us. I do not, however, find upon inquiry, that they have lately much increased; or that the sea has much incroached upon other parts of this coast; as might be expected, from its situation. On making the same inquiry, as to this latter article, in relation to the neighbouring coast of Monmouthshire, Mr. John Morgan, whom I have so often mentioned, obligingly informed me, that, on examining a survey taken of that coast and level near it in the reign of queen Elizabeth, it appeared, that the sea had made no considerable incroachments since that time. Mr. Lethieullier observes, that, between Merthyr Mawr, near which also were deep sands, and New Inn bridge, the river Ogmore, or rather a branch of it, runs a quarter of a mile under the hills, passing also under several natural bridges; after which, issuing out again with great violence, it joins the main stream. The maps here again mistake, in giving this river the name of Ogmore, before its junction with the Wenny; after which only it assumes that name; being called before the Bridgend river, as it comes from Bridgend, where it runs under ground a little to the north of that place, and appears again from under Ogmore hill. On the 26th July, 1768, an extraordinary fresh of the river Ogmore is reported to have carried away many houses, besides the loss of many lives. The Tive also frequently occasions damage. As these Glamorganshire rivers descend directly from a neighbouring chain of high and steep hills, their great and sudden rise in the subjacent plains is not to be wondered at. Skuscar isle is a rock near the mouth of the Ogmore, which the sea washes over, particularly at high water, and in

ſtorms; and Mr. Lethieullier adds, that two ſons of the family of Vaughan, who purchaſed of the Butlers the manor of Dunraven, in which this iſland is included, loſt their lives here; by which means the family became extinct, and the Wyndhams purchaſed the eſtate. St. Donat's Caſtle, which was given by the Stradlings to lord Manſel, is alſo particularly mentioned by Mr. Lethieullier; and I had much pleaſure in ſeeing it, on account of its good preſervation, and the fine command it has of the ſea. The hanging gardens under it, leading down to the ſhore, are alſo much to be admired in point of ſituation, and muſt have been very beautiful, when they were kept in perfect order. The wall to the ſea at the bottom of them is, however, in very good repair, as well as the park wall. In the caſtle, which Mr. Lethieullier particularly deſcribes, I obſerved many buſts of the Caeſars, Cleopatra, &c. The church is at a little diſtance from the houſe, and rather low. In the burying iſle are two good monuments of the Stradling family; and in the churchyard is a very compleat ſtone croſs, with the figure of our bleſſed Saviour on it, with two diſciples, all in emboſſed open work; the ſhaft is octangular and of one piece, with a pedeſtal, and three deep ſteps beneath it. I omitted to mention, that Mr. Lethieullier, ſpeaking of Cardiff, ſays, that it is about 1280 paces in circumference, had a wall round it, and four gates to the four cardinal points. The caſtle is on the north ſide of the town, and has high and thick walls, with battlements and a parapet; and Mr. Lethieullier is alſo very particular in his deſcription of it. The ſquare Gothic tower of Cardiff church is very light and in good taſte; and commands a fine view of the ſea and adjacent plain. Though the town contains two pariſhes, yet it has only one church; the other having been gradually undermined by the violent current of the river Tave, which, when ſwoln by the mountain torrents, runs

very

very rapidly, carrying a great body of water, and still makes considerable depredations in the town, as I myself observed. No Roman coins did I hear of either at Lantwit Major, or at St. Donat's, notwithstanding their reputed antiquities. The beautiful prospect of the vale of Glamorganshire, from Cowbridge common, but particularly from Sir Edmund Thomas's summer house, a little further on the road towards Cardiff, where it is very extensive, cannot fail to engage the attention of every traveller, that passes through this country. I also remember to have observed a pretty vale prospect from Newport church, without the town, and beyond which, about half a mile westward, is a small antient camp, perhaps Roman, most pleasantly and advantageously situated, nearly on the same elevation. There is also a very fine prospect on the road from Cardiff to Caerphilly, from above Mr. Lewis's, under Thorn Hill house; but they are so common throughout this beautiful country, that it is almost needless to specify them. Mr. Lethieullier particularly mentions *Mynydd Dormina*, or Drummer, as the Welsh call it, which is a hill about three miles from Neath, on the top of which he describes the following antiquities. In the middle of a circular row of stones, about thirty feet in diameter, is a British monument called *y-gist-waen*, or the stone chest; consisting of four stones set up edgewise, in a parallelogram, and covered at top by a fifth. As the area of the inside measures only five feet in length, Mr. Lethieullier supposes this chest to have served only to receive the ashes of the dead. He further observes, that these stones do not appear to have been ever joined together by any cement, though bishop Gibson, in his additions to Camden, says, it was formerly of mason's work, though now quite gone. On such intelligence, curiosity excited me also to visit *Mynydd Dormina*. From Neath I took the Swansea road, turning out of it soon to the right, a

little beyond the old gateway, ſtill remaining, and formerly belonging to Neath abbey, and aſcended the hill on the eaſt ſide, by a ſteep and ſtony way, near which I obſerved ſome coal works, and ſo by a copſe, under the brow of the hill. The top of *Mynydd Dormina* is a flattiſh paſture; but, to my great ſurprize, I ſearched there in vain for the ſtone cheſt before mentioned, and ſo lately ſeen by Mr. Lethieullier; nor had my guide, or others, of whom I inquired, ever heard of any thing like it. I, however, obſerved there a large upright ſtone, like many others often ſeen on the tops of the Welſh mountains, and which are nevertheleſs equally conſidered to be, and probably with reaſon, of Britiſh antiquity. This ſtone meaſures about fourteen feet high, four feet wide, and about two feet thick. The removal of ſuch bulky maſſes to theſe elevated places, is one of the great objects of modern wonder; eſpecially as it often, and, indeed, moſtly happens, that none of the ſame kind is to be found in the neighbourhood. I have often obſerved that though ſuch ſtones ſeldom ſeem to have been much worked, yet they commonly appear to have been choſen of a particular form, and nearly ſimilar. That they are the remains of ancient and ignorant ſuperſtition is little to be doubted; eſpecially as they are found in almoſt all countries, however uncivilized. Two ſuch, ſerving as gods, or idols, are, for inſtance, deſcribed to be in Eaſter Iſland in the Pacific Ocean [*b*]. Indeed it is no wonder, if, in any country, during the infancy of civil ſociety, ſuch objects ſhould be idolized, or ſerve as the monuments of their heroes, &c. as they naturally convey to the mind a great idea, eſpecially when placed iſolated on the tops of high mountains, or in extenſive open plains, as they commonly are. It is alſo obſervable, that theſe ſtones are moſtly

[*b*] Dalrymple's Collection of Voyages, &c. vol. II. p. 114.

of

of the compound kind; whether granite, moorſtone, or the like; which was doubtleſs preferred, as ſuch are of much harder nature, and therefore reſiſt the weather much better than any other of an homogeneous kind, ſuch as limeſtone, common ſandſtone &c. Returning to *Mynydd Dormina*, beſides the large ſtone before mentioned, I alſo obſerved, not many yards diſtant from it, a large heap of ſmall ſtones, which, in ſuch ſituations particularly, are likewiſe conſidered either as religious or monumental, and may probably be thoſe mentioned alſo by Mr. Lethieullier; but the ſtone cheſt in queſtion has either been removed ſince his time, or I muſt have miſſed the ſight of it, through the ignorance of my guide. But it is time to quit this part of my ſubject.

I SHALL now beg leave to obſerve to the Society, that among the preparatory memorandums which I minuted previous to my tour through this county, one was, to unite my endeavours to thoſe intended by the learned Dr. Plot, as mentioned in his account of a deſigned journey through England and Wales, inſerted in Leland's Itinerary [*c*], to find the Iſle *Baruchus* on this coaſt, in which he ſays "there is a cave from whence are heard "the noiſe of hammers, the blowing of bellows, as if it were "the ſhop of the Cyclops." My object in this reſearch was not ſo much the phenomenon itſelf, which is a merely accidental, and no very uncommon effect in ſtony and mountainous coaſts, but a deſire of aſcertaining a ſpot recorded by ſo many and celebrated writers, not only of our own, but alſo of foreign countries. Clemens Alexandrinus and Varenius particularly mention it; the latter in the following words, which Dr. Plot ſeems nearly to have tranſlated. *In inſula* BARUCHUS *(adjacet Walliae provinciae Angliae) ad mare rupes eſt, in qua hiatus,*

[*c*] Vol. II. p. 136. of the new edition.

ad

ad quem si aurem admoveris, malleorum ictus, follium motus, ferri stricturas, quasi in officina ferraria, exaudias [d]. It is also mentioned by the great Camden and other authors; and is supposed to refer, on the strength of etymology principally, as I presume, to the small island of Barry on the coast of Glamorganshire, between Cardiff and Cowbridge. Lord Bacon [e], in his History of Winds, describes a similar phenomenon at *Aber-Barry, juxta Sabrinam*, as he writes; but as I find no such place as Aberbarry near the Severn in any of the maps, I suppose he must also have meant the island of Barry, which is indeed situated near the mouth of this river. This BARUCHUS *Insula* of Varenius, be it Barry, or not; seems also celebrated in ecclesiastical history for its saint of that name, who is particularly mentioned by an old author in the following title; *Imago beati* BARUCHI, *seu acta praecipue Barrochalia P. Forerii, Parrochi in Malainour*, Hag. Com. 1649, 8vo. According to Leland [f] it should seem, that Barry was actually meant here; since, speaking of the island, he says, "there is no house in it, but in the "middle a fair little chapel of St. Barrok, where much pilgri-"mage was used." He also observes, that, at low water, there is a causey to go over to the island, which he makes only a mile round. Baxter also, in his Glossary, Art. *Birinas*, says, *hodie* Barry Island, bir-mas-*brevis insula, quod incolae crepant de nescio quo Sanctulo Barro.* Being prevented visiting this island myself, when in the neighbourhood, on account of bad weather, I was obliged to content myself with the information of others, and received the following from Sir Edmund Thomas, by favor of the Rev. Mr. Aubrey of Yneskedwin near Neath, to whom I immediately addressed myself, and to whom I am

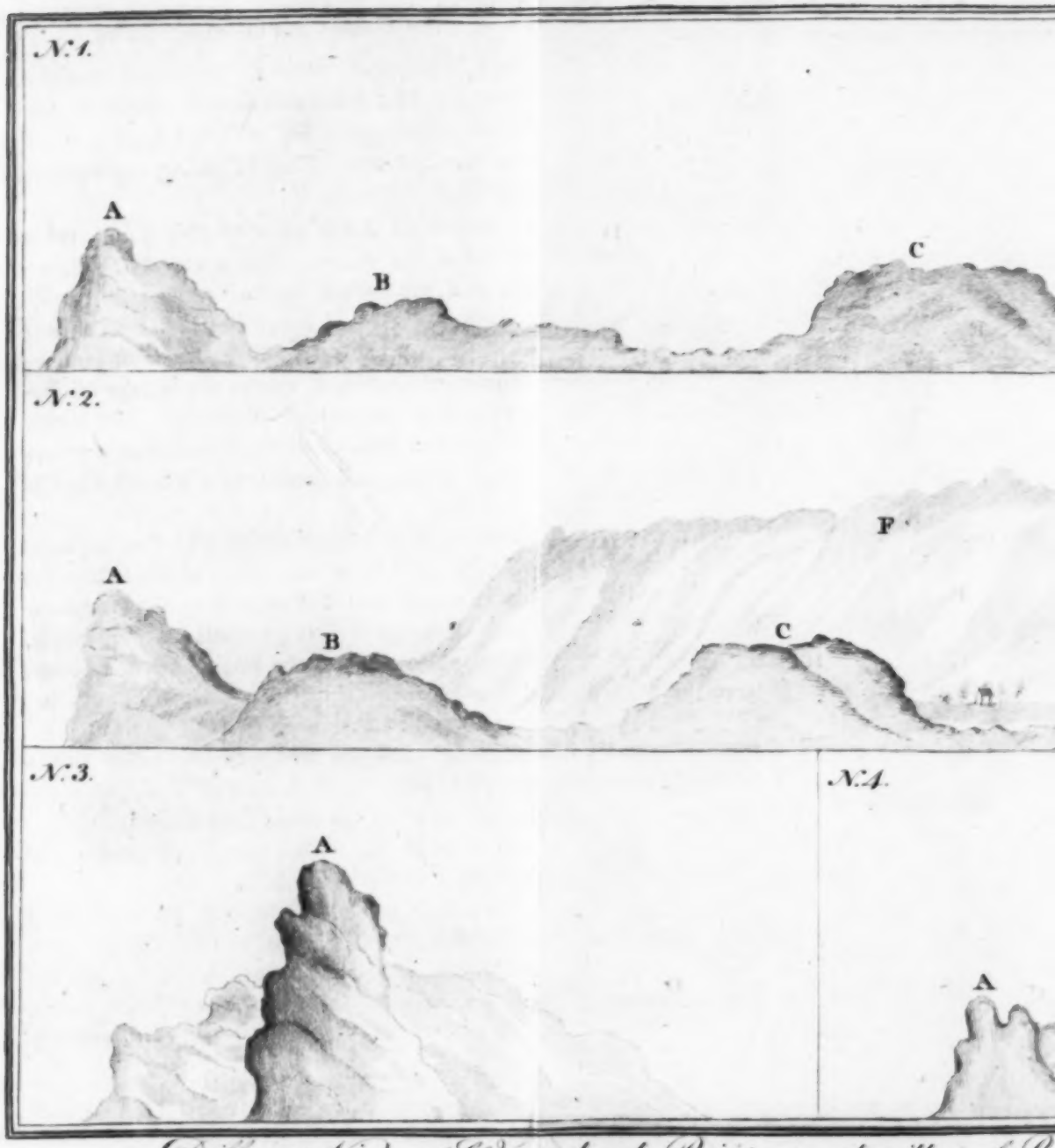
[d] Varen. Geograph. General. Pars 1ma. sect. iii. cap. 10.

[e] Bacon. Hist. Ventorum in Oper. Edit. Lugd. Bat. 1648, 12°. pag. 40. art. 12.

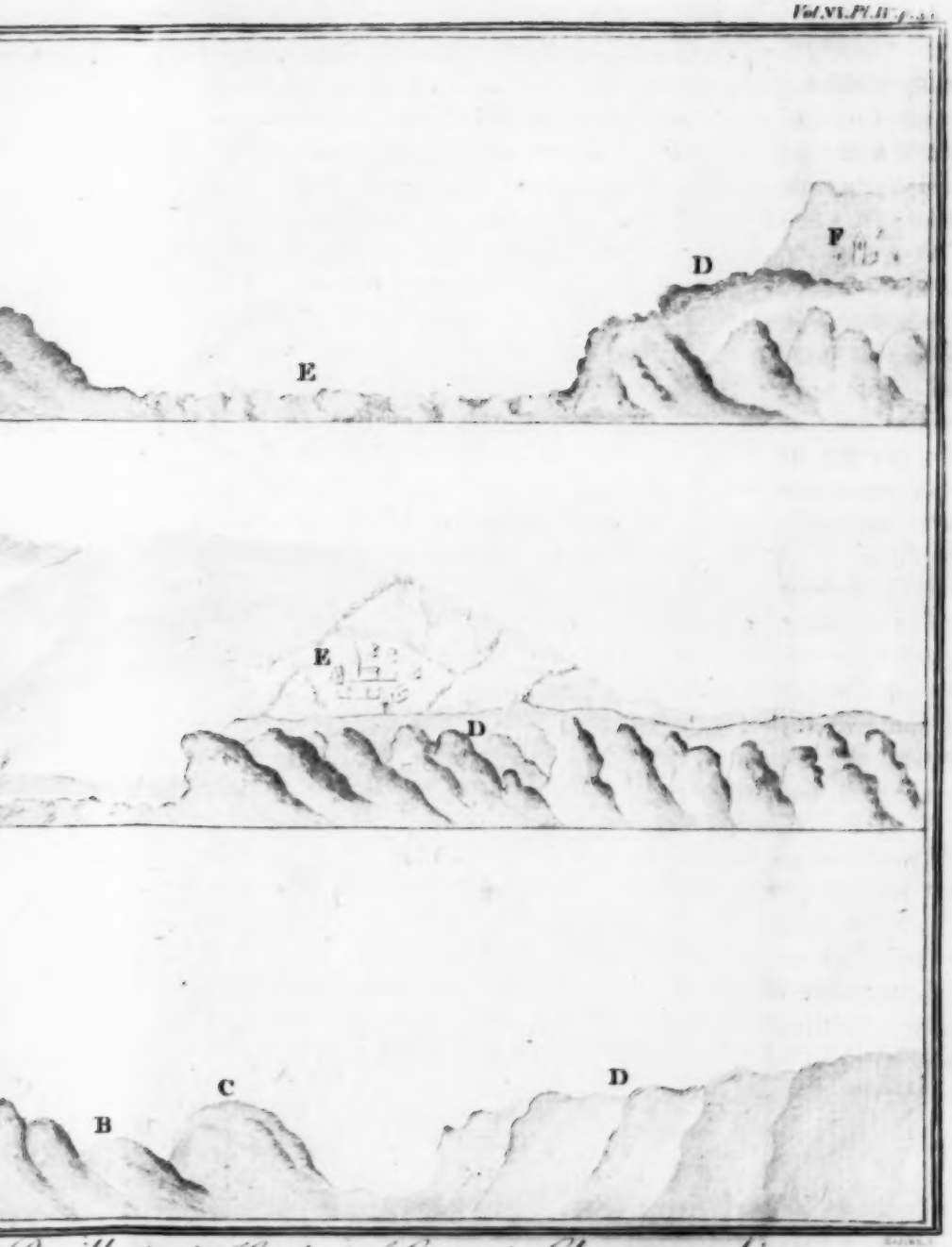
[f] Itinerary, vol. IV. p. 42.

alſo obliged for other communications, as well as for his hoſpitality. According, therefore, to this Gentleman's account, the iſland of Barry is between three and four miles in circumference, formed chiefly of a limeſtone rock, which, as Leland rightly obſerves, joins the main land at low water. It is in the pariſh of Marthyr Devan; and has at preſent only one houſe on it, in which the tenant lives; but, on a riſing ground, at the eaſt ſide of the iſland, are the foundations of an old building, which ſtill goes by the name of *the Old Chapel*. This is very probably the remains of the little chapel of St. Barrok, alſo mentioned by Leland. Sir Thomas obſerves further, that he had often heard, among the common people, of an odd air hole in Barry, towards the weſtern point of the iſland; but had never been able to aſcertain the fact. He is therefore of opinion with me, that it is a miſtake; and that the air hole in queſtion is one known to be at Wormſhead Point, which, I muſt here take occaſion to obſerve, might, on many accounts, eaſily be miſtaken for BARUCHUS *Inſula*, or Barry. For it is on the ſame coaſt of Glamorganſhire, forming the weſtern extremity of Gower hundred; is nearly of the ſame extent; and alſo conſiſts of a limeſtone rock, that joins the main land at low water. Mr. Aubrey, however, informs me that ſometimes ſhips of a hundred ton burthen have been known to ſail over the iſthmus; which may very eaſily happen during the ſpring tides, which riſe to an extraordinary height on this coaſt, as I before obſerved in my account of Monmouthſhire. Another ſource of miſtake might have ariſen from the affinity of the names of ſeveral places in the immediate neighbourhood of Wormſhead Point. For Mr. Aubrey obſerves, that this point forms one ſide of the bay, or harbour of *Burry*, as he calls it; and which I ſuppoſe to be the ſame with that marked in Kitchin's map of this county

Rosilly Bay, from the neighbouring village on the coast. But it is also observable, that, in the same map, near Rosilly, also on the main land, several *Burrys* are likewise marked; as Burry-head, Burry-green; and, at a little distance near Whitford Point, Burry-bar. And as Burry-head is nearest to Wormshead, and is a more suitable appellation to mark a point or promontory, than any other spot, it is not improbable that it may formerly have been applied to this point in particular; especially as the present name seems rather whimsical and adventitious. Be this as it may, the affinity of the two names *Barry* and *Burry*, and the natural similitude, in point of character and situation, between Barry island and Wormshead Point, may probably have occasioned the above mistake in the different writers, who ascribe this Æolian cavern exclusively to the island of Barry, where, in reality, no such is to be found. Nor does it seem extraordinary that a popular credulity should also be founded on the same mistake. As to the air hole, or cavern itself in Wormshead, which I have visited, it terminates by a small opening at the top of the limestone rock, and probably communicating, by subterraneous channels, with another similar opening towards the beach beneath, occasions the rumbling noise, which is heard at the top, and is applicable enough to the above description given by Varenius and other authors. Such phenomena are not uncommon, as I before observed; and lord Bacon, in the preceding article of his History of Winds, in which he describes that of Aberbarry, also mentions another in Denbighshire, on the authority of Gilbert, who, I suppose, speaks of it in his voluminous treatise *de Magnete*. For the reasons beforementioned, Lord Bacon's Aberbarry might perhaps also refer to Wormshead. Exclusive of these circumstances, Wormshead point, from a particular survey of it, appeared to me

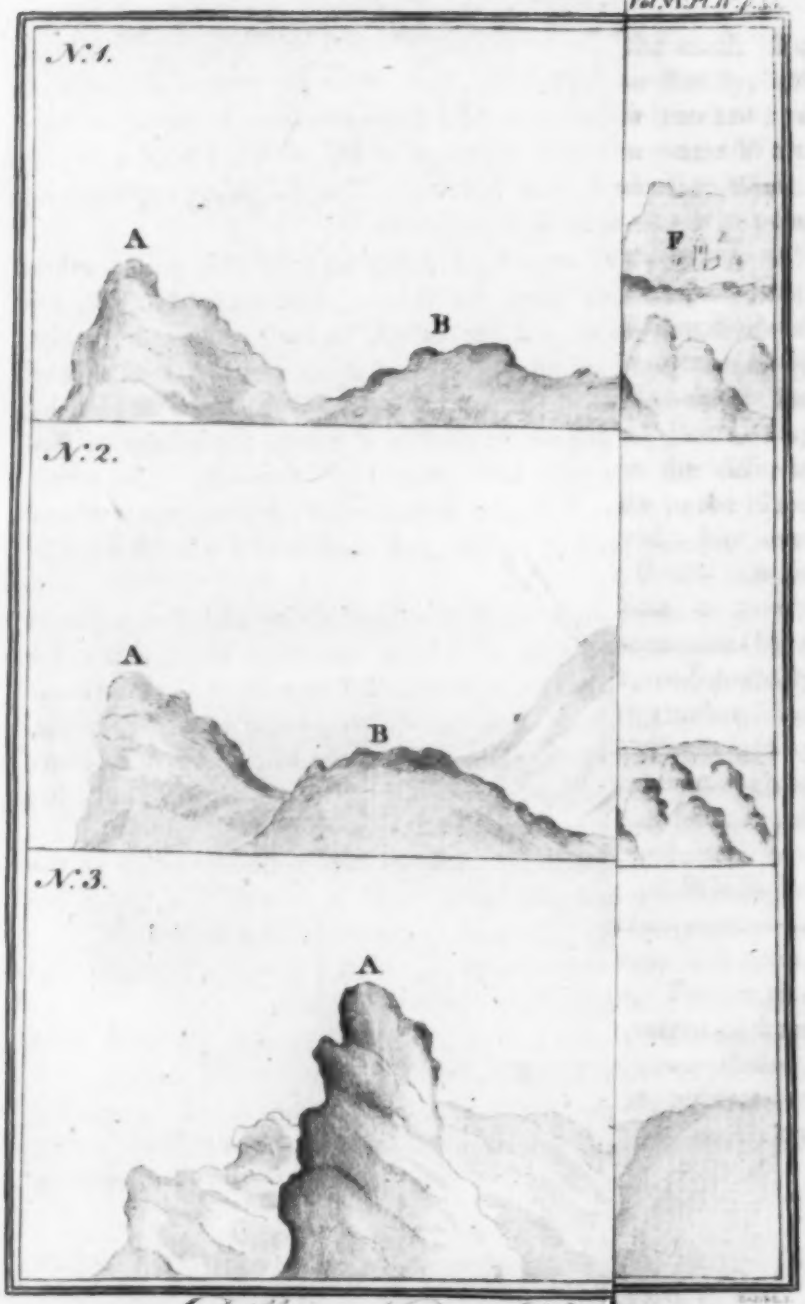


Different Views of Wormshead Point near the village of Re



Rosilly in the Hundred of Gower in Glamorganshire.

me so
the fav
cure m
prove
may fu
N° 1
about
islands
the out
rock, a
the low
silly, on
rocky p
water, l
limeston
A sou
land is r
distant fr
tion of
the few
hood of
sides a sm
N° 3.
westward,
low rocks
A south
D, as befo
Accor
to be resp
montory,
name, Wo



Different Views of Worle.

me ſo curious a head land, that, after my return, I requeſted the favor of the Reverend Mr. Aubrey beforementioned to procure me the annexed drawings of it, which I hope will alſo prove acceptable to the Society. The following explanations may further ſerve to illuſtrate them.

N° 1. Plate IV. repreſents a ſide view of this point, taken about a mile ſouth from the ſhore. The rocks A, B, C, are iſlands at half flood, and are called, in their order reſpectively, the outer head, middle head, and inner head. D is a ſteep rock, and part of the main land, to which the point joins by the low craggy iſthmus E; while F marks the village of Roſilly, on the ſide of a hill riſing high above it. The whole rocky promontory, from the main land D, is a peninſula at low water, bearing weſt by north, and conſiſts of a whitiſh kind of limeſtone.

A ſouth weſt view of Wormſhead Point and the adjacent land is repreſented by N° 2. which was taken about four miles diſtant from the ſhore, and in which F repreſents the continuation of the hill from Roſilly, which is moſtly a ſheep walk, the few encloſures being confined to the immediate neighbourhood of the village; as is more diſtinctly ſeen in this view, beſides a ſmall tenement &c. at the foot of the hill.

N° 3. is a longitudinal view of Wormſhead, taken to the weſtward, in which the outer head A only is ſeen, with the low rocks about it, and a part of the main land behind.

A ſouth ſouth eaſt view of it, with a part of the main land D, as before marked, is repreſented in N° 4.

According to the beſt of my remembrance, all theſe ſeem to be reſpectively faithful repreſentations of this curious promontory, and ſufficiently manifeſt the origin of its preſent name, Wormſhead; the outline, formed by the different rocks,

alternately high and low, ſomewhat repreſenting, though rudely, the figure produced by an earth worm, when in motion. Wormſhead point alſo merits the attention of naturaliſts, for the extraneous and marine foſſil bodies it contains, eſpecially *entrochi*, which remaining often prominent above the ſurface of the limeſtone, on account of their reſiſting better the action of the air, make a ſingular appearance; whence they are believed to be, by the peaſants there, the hardened excrements of ſea gulls, and other ſuch wild fowl, that frequent thoſe rocks. There is a conſiderable tract of high mountainous land in Gower hundred, on the tops of which, as I was informed, are ſeveral *cromlechs*, and other Britiſh remains, though I had not the opportunity of viſiting them. Some of them are, however, ſo large, that, being alſo ſituated on the ſummit of the naked mountain, I could eaſily diſcern them, even at a conſiderable diſtance. I obſerved the remains of an old caſtle near Port Inon, a little diſtant from Wormſhead Point, to the ſouthward; but the towered caſtle, near Oſwich bay, deſerves much better the attention of the curious traveller; as there are ſtill very conſiderable remains of it, and in a good ſtyle.

I SHALL not preſume to intrude upon the ſufferance of this reſpectable Society by any particular account of the natural curioſities of Glamorganſhire, though they alſo formed a conſiderable, and, indeed, the principal object of my inquiries there. I cannot, however, conclude this paper without obſerving, that many of them highly merit attention, eſpecially the *phytotypolithi*, or foſſil impreſſions of plants in the ſtrata about the coal mines, and which are very curious. They are chiefly *filices*; not of our common indigenous ſpecies, but exotics; and I remarked ſeveral, that ſeemed to correſpond exactly with ſome of the American *filices* figured by Plumier in his celebrated Herbal.

Bal. I have ſince ſeen much the ſame impreſſions in the ſtrata of the coal mines of St. Chaumont, in the province of Lionnois in France; the origin of which has been ſo very ably diſcuſſed by that late learned naturaliſt Monſieur de Juſſieu [*g*]. I alſo obſerved ſimilar impreſſions in the coal ſtrata near Rive de Giez, in the ſame neighbourhood. Other impreſſions, nearly of the ſame kind, are likewiſe obſervable in the iron ſtone of Glamorganſhire; particularly between Breton Ferry and Neath; and which appeared to me more curious than any I had ever ſeen before, or, indeed, ſince. A recent author, Mr. Beuth [*b*], in his account of ſome extraneous foſſil bodies of Lower Germany, has given the deſcriptions and figures of two curious *phytotypolithi*, greatly reſembling ſome of thoſe, which I remember to have particularly remarked in the ſaid iron ſtone. Mr. Beuth may well ſtyle theſe bodies *rariſſimi partus*. The hilly promontory a few miles to the weſt of Cardiff, as well as the blue limeſtone of the lower country, between Cardiff and Newport, alſo affords foſſil marine bodies in plenty, eſpecially the *Gryphites* oyſter, which is not only found abundantly in the lower part of Monmouthſhire, and about Purton Paſſage, but alſo extends, in conſiderable aggregates, along the neighbouring midland counties; having myſelf traced them, either in the gravel or limeſtone, through Glouceſterſhire, Worceſterſhire, Warwickſhire, and Leiceſterſhire; occupying in like manner the lower parts of thoſe counties, under the hills. In the high mountains on the confines of Glamorganſhire and Brecknockſhire, near Yneſkedwyn, the ſeat of my friend the reverend Mr. Aubrey, whom I cannot mention without a grateful ſenſe of

[*g*] Mem. de l'Acad. des Sciences de Paris, 1718.

[*b*] Juliae et Montium ſubterranea &c. Ser. 1ma. N. 13, 14. Duſſeldorp. 1776. 8vo.

his

his hospitality to me, I observed a rock of the same kind of black shelly marble that is found in such plenty near Kilkenny in Ireland; and which I afterwards saw in great abundance in Pembrokeshire, where it is also worked. The petrified marine shells contained in all these marbles are striated *conchae anomiae*, which are not only exotics, but known to be extremely scarce. But I shall no longer engross the attention of this learned Society, than to express my earnest desire, that my endeavours, in this present paper, may merit that indulgence from them, which I have so agreeably experienced upon former occasions.

III. *An*

III. *An Illuſtration of a* Saxon *Inſcription remaining in the Church of* Aldbrough, *in* Holderneſſe, *in the Eaſt-Riding of the County of* York, *in a Letter addreſſed to the Reverend* Owen Manning, *of* Godelming, *in* Surry, B. D. *and* F. R. S. *and* F. S. A. *by* John-Charles Brooke, *Eſq.* Somerſet *Herald*, F. S. A.

Read April 30, 1778.

Dear Sir,

YOUR acknowledged ſkill in the languages of the ancient inhabitants of this iſland, has induced me to lay before you a Saxon monument of great antiquity, yet remaining in a church in Yorkſhire; and it will make me happy if the interpretation of the inſcription meets with your approbation.

The unſettled ſtate of the Anglo-Saxons in this country, occaſioned by the government of a turbulent Heptarchy, and afterwards by the continual incurſions of the Danes, gave little encouragement to the progreſs of the arts, and leſs to the ambitious to hand down their fame to poſterity by memorials of this nature; hence the few erected in thoſe ages now remaining in this kingdom muſt particularly engage the attention of us, their deſcendents.

The

The monument in queſtion is an inſcription engraved on a circular ſtone, fixed over a pillar on the ſouth ſide of the nave of *Aldbrough* church in Holderneſſe, in the Eaſt-Riding of the county of York, and running round the margin of the ſtone, which projects about two inches from the wall, and is twelve feet from the pavement. The copy [*a*], which I ſend you, was taken by my worthy correſpondent, the reverend Mr. Dade, rector of Barmeſton in Yorkſhire, who made a tour laſt ſummer to Aldbrough, on purpoſe to furniſh me with proper information on the ſubject, and to whom the lovers of antiquity have on various occaſions been obliged, for his ready aſſiſtance in furthering their purſuits. It has been compared with a facſimile taken by our friend John Topham of Gray's-Inn, Eſq. in the year 1772, which, by his favour, I alſo ſend you; and with another copy from the manuſcripts of the late Dr. Burton of York, author of the Monaſticon Eboracenſe.

The inſcription may be read thus.

Sax.

"Ulf het [*b*] aræran [*c*] cyrice, for Hanum, and for Gunthard ſaula."

Lat.

"Ulfus juſſit erigere eccleſiam, pro Hano, et pro Gunthardi animâ."

Eng.

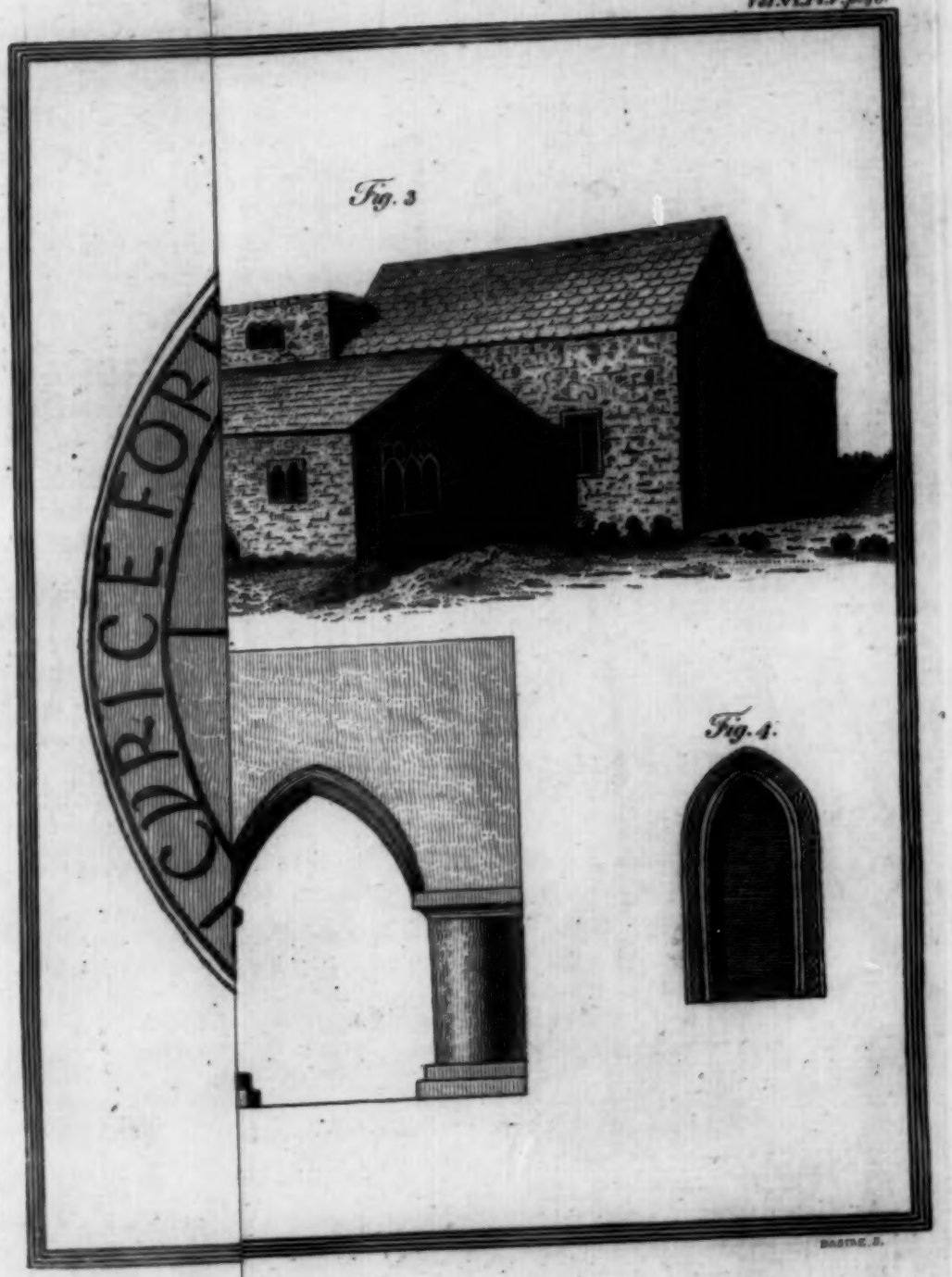
"Ulf commanded this church to be erected for the ſouls of Hanum and Gunthard."

The diameter of the ſtone is fifteen inches and a half, and the internal ſpace is divided into eight angles by equi-diſtant

[*a*] See Plate V. Fig. 1. Fig. 2. ſhews the ſituation of the inſcription. Fig. 3. repreſents the church of Aldbrough, and Fig. 4. one of its antient doors.

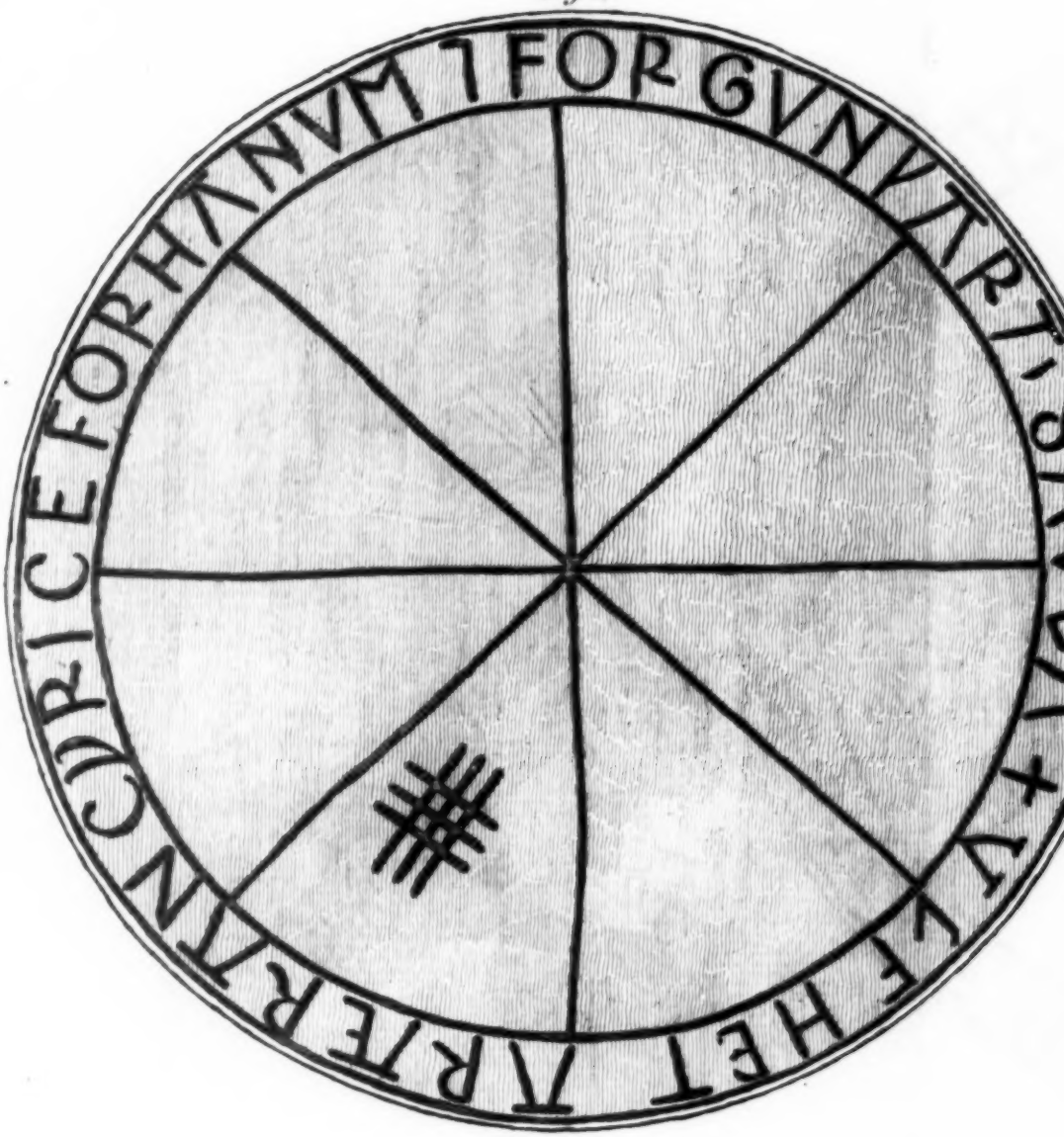
[*b*] Þet ſýllan. Juſſit dare. (Sax. Goſp. Matt. ch. xix. v. 17). Þet ꝥaꝥan oꝥet. Juſſit tranſire, id. Matt. c. viii. v. 18.

[*c*] Ic hit arære, Ego illud excitabo, id. Joh. c. ii. v. 19. Ꝥræræꝥ þu hit, Num excitabis tu illud? id. v. 20.

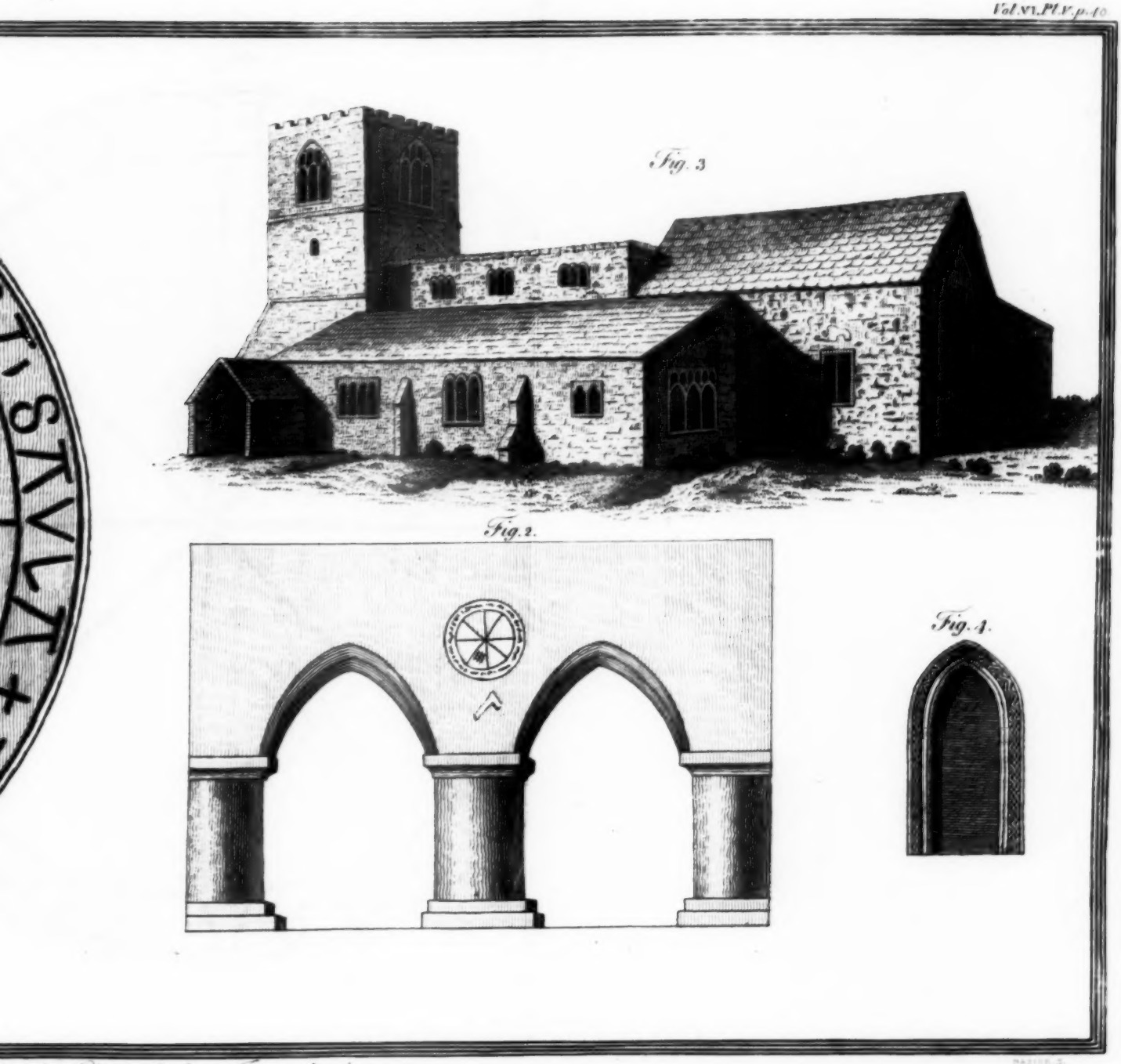


BASIRE. S.

Fig. 1.



Aldborough



ugh Church & Inscription.

Radulphus, filius Will'mi filii Ulfi, Dominus de Grimethorpe, &c. in co. Eb. — Emma, filia Waldeni, habuit manerium de Nesham in com. pal. Dunelm in libero maritagio ut per cart. sine dat.

Ranulphus, filius Walteri, D'n's de Creyftoc, vixit tempore Henrici secundi, et obiit 12 Johis. — Amabilis, uxor Ranulphi, ut per cart. s. d.

Radulphus, filius Ra'di, filii Will'mi, D'ns de Grimethorpe, Fangefosse, Meltemebia & Geveldala, in co. Eb. & de Nesham.

Willielmus, filius Ranulphi, Dominus de Greyftock, in comitatu Cumberlandiæ.

Willielmus, filius Ra'di, Dominus, de Grimethorpe, &c. ut per cart. s. d. — Joanna, soror Roberti de Meinill. habuit octo libratas terræ in Atingewic in libero maritagio, ut per cart. s. d.

Thomas filius Will'mi, D'n's de Greyftock, habuit liber. terrar. suar. 1 Hen. III. vixit 23 ejusd. regni. — Maria, filia Robt'i de Veteri-Ponte, D'ni de Tickhill.

Radulphus filius Will'mi, Dominus de Grimethorpe, &c. vix. 12 Hen. III. 1228, ut per cart. s. d. — Joanna, filia Thomæ filii Willielmi, D'ni de Greyftock.

Willielmus filius Thomæ de Greyftock, vixit 38 & 46 Hen. III. 7 & 8 Edw. I. ob. in anno 17 ejusdem regni. — Maria, prima filia et cohæres Rogeri de Merlay, domini de Morpeth.

Willielmus, filius Radulphi, Dominus de Grimethorpe, Meltemebia, Fangefosse, Geveldala, Nesham, &c.

Johannes de Greyftock, D'nus et Baro de Greyftock, summ. ad parliam. a 23 Edw. I. usque ad mortem ejus. æt. 25 ann. 17 Edw. I. Dedit terras suas Rad'o fil. Will'i de Grimethorpe, & ob. s. p. 34 Edw. I.

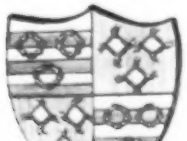
Galfridus filius Willielmi, d'ns de Grimethorpe, &c. primus filius et hæres. Obiit sine prole, anno 24 Edwardi primi regis Angliæ.

Radulphus filius Willielmi, D'n's de Grimethorpe hæres fratris ejus, & adoptatus hæres Joh'is de Greyftock. summ. ad parl'm a. 23 Edw. I. ad 10 Edw. II. ob. eod. anno, sepultus apud Nesham in comitatu palatin. Dunelmens. — Mariora, filia & cohæres Hugonis de Bolebec, relicta Nicholai Corbett, nupta Rad'o de Grimethorpe, anno 10 Ed. primi.

Robertus, dictus de Greyftock, D'n's de Grimethorpe, Greyftock, Morpeth, &c. ob. 10 Edw. I. sepult. apud Batterwick, in com. Ebor. — Elizabetha, filia Radulphi de Nevile de Scotton, obiit 25 Octob. anno 20 Edw. III. ut per inquisitionem post mortem.

Radulphus de Greyftock, D'n's et Baro de Greyftock, &c. æt. 18 ann. 10 Edw. II. summ. ad Parl. 14, 15 & 16 Edw. II. Ob. veneno, 3 July, 16 Edw. II. 1323. sepult. apud Newminster in co. Northumb. — Alicia, filia Hugonis, D'n'i Audley, nupta licentiâ papali 12 Edw. II. renupta Radulpho, d'no Nevile de Raby.

Willielmus, D'n's et Baro de Greyftock, æt. 3 ann 1323. summ. ad Parl. a. 22, ad 31, Edw. III. adfirmavit castrum de Greyftock, ob. 20 July, 32 Ed. III. testatus de maneriis de Greyftock, Grimethorpe, Hinderskelfe, &c. & de Seton, in co. Eb. quod Ulfus, antecessor ejus, tenuit 1. Ed. Conf. regis, sepult. apud Greyftock, ubi tumulus ejus adhuc extat. — Joanna, filia Henrici, d'ni Fitz-Hugh de Ravenswath, renupta Antonio de Lucy, obiit anno 48 Edw. III.



Stemma **Ulfi** Comitis, in Provinciâ Deiræ ante Conqueſtum. D'ni de Aldburgh t. Edvardi Conf. Regis, et Eccleſiæ de Aldburgh ædificatoris, ut per inſcriptionem conſtat.

Thoraldus, Pater Ulfi.

Forno, filius Siulfi, vel Liulphi, cui Ranulphus de Meſchines, D'n's de Cumberlandiâ ex dono Will'i Conq. conceſſit Baroniam de Creyſtoc.

Ulfus, filius Thoraldi, Comes in Provinciâ Deiræ, dedit multas terras Archiepiſcopo Eboraci. D'n's de Aldenburg, et Settun temp. Edvardi Conf. Regis, ut apparet in libro vocato Doomſday. Ædificavit eccleſiam de Aldenburg, ut per inſcriptionem conſtat.

Ivo, filius Fornonis, Dominus de Creyſtoc, tenuit terras Patris ſui in Comitatibus Ebor. Northumbr. Cumb. et Weſtmorland.

Willielmus, filius Ulfi, cui Hen. I. Rex Angliæ conceſſit maneria de Thorpe, Fangefoſſe, Melitemebia et Geveldala in comitatu Eboraci.

Stirus, filius Ulfi, dictus civis dives, in chronico Simonis Dunelm: habuit multas domos in civitate Eboraci, ut ex lib. vocato Doomſday conſtat.

Walterus filius Ivonis, D'n's de Creyſtoc, vixit tempore Henrici primi, regis Angliæ.

Radulphus, filius Will'mi filii — Emma, filia Waldeni, habuit mane-

Ranulphus, filius Walteri, D'n's de — Amabilis, uxor

lines meeting in the centre; in one of which, near the baſe, is a rude figure compoſed of ſix lines croſſing each other at right angles.

From the following circumſtances, as well as this inſcription, the church of Aldbrough appears to have been built by the Saxons, though it now has a more modern appearance, owing to the ſucceſſion of repairs it has undergone, and the addition of windows very different from the original lights. The walls in general are made of round pebble ſtones, ſuppoſed to have been gathered from the ſea-ſhore in the neighbourhood, which kind of ſtones by a ſtrong cement make very durable buildings; but the lower part of the ſouth wall of the chancel is built with hewn ſtone (ſuch as was generally uſed in our moſt ancient cathedral churches), upon which there are ſome groteſque figures, and in the north wall is a narrow window about five feet high: the chancel door alſo, which is a ſouth entrance, is low and narrow, and has over it an elliptic arch, ornamented (if I may uſe the expreſſion) with zig-zag work, which was a ſtile peculiar to the Saxon architecture. Theſe remains evince, that though the building is now much altered, it was originally erected by our Saxon anceſtors.

As this inſcription will help to clear up an event in hiſtory, which was of much conſequence to theſe northern parts at the time it happened, I find much ſatisfaction in having collected ſeveral records which will ſerve to elucidate the identity of the parties mentioned therein.

Aldbrough is ſituated in that part of the Northumbrian kingdom which in the Saxon times was called Deira, and was bounded by the rivers Humber and Tees; and in this province, Camden informs us [*c*], there anciently ruled one *Ulf*, or *Ulph*,

[*c*] Brit. 1600.

ſon of Thorald, who, by reaſon of the difference which was likely to ariſe between his ſons about the ſharing of his lands and lordſhips after his death, reſolved to make them equal; and thereupon coming to York, with that horn wherewith he was uſed to drink, filled it with wine, and, kneeling devoutly before the altar, drank the wine to God, and St. Peter prince of the Apoſtles, and by that ceremony enfeoffed the church of York with all his lands and revenues [*d*].

THE horn, the inſtrument of this donation, has been the ſubject of a curious hiſtorical diſſertation by Samuel Gale, Eſq. formerly read at the Society of Antiquaries, and printed in the firſt volume of the Archaeologia [*e*]. The learned author gives an extract from an ancient manuſcript in the Cotton Library, wherein *Ulf* is ſtiled *Conſul, et inſignis comes*, and ſhews he poſſeſſed a great eſtate in Deira, which Mr. Gale ſuppoſes had been given him by king Canute, for aſſiſting him in reducing theſe northern parts; and indeed his poſſeſſions muſt have been very great, for it appears from Doomſday-Book, that when the general ſurvey was made, a°. 20 Willielmi I. Thomas archbiſhop of York, his canons and men, poſſeſſed the following manors in the province of Deira, which were held by Eldred the archbiſhop in the time of Edward the Confeſſor, and had belonged to *Ulf*, viz.

" *Langheton, Cottun, Saletun, Bragebi, Bergh, alia Bergh,*
" *Nagbelton, Maltun, Wilbetun, Pochelaf, Ambreforde, Flaxtun,*
" *Mortun, Baſchebi, Carletun et Stanegrif* [*f*]."

[*d*] " Dominabatur *Ulphus* ille in occidentali parte Deirae, et propter altercationem filiorum ſuorum, ſenioris et junioris, ſuper dominiis poſt mortem, mox omnes fecit aequa pares. Nam indilato Eboracum divertit, et cornu, quo bibere conſuevit, vino replevit, et coram altari, Deo, et beato Petro apoſtolorum principi, omnes terras et redditus flexis genibus propinavit."

[*e*] Page 168.

[*f*] Doomſday-Book, f. 303.

THESE

THESE had all been the inheritance of *Ulf*; and, ſpeaking of Stanegrif, the record expreſsly ſays, "*In Stanegrif (tempore regis Edwardi) tenuit Ulf ſex bovatas, idem dedit Sancto Petro.*" This evidently proves that *Ulf* lived in the time of the Confeſſor, and probably died in his reign, as Edward confirmed all the donations which he had made to the church [*g*].

BESIDES the manors which Ulf gave to the See of York, he poſſeſſed other eſtates which that church ſeems to have had no concern with [*h*]; and amongſt theſe *Aldbrough* occurs, where he placed the inſcription, and of which he was lord in the time of Edward the Confeſſor, as appears by the following extract from the ſame record:

Eurvicſcire

In Terrâ Drogonis de Bevrere.

Holdreneſſe.

"In manerio *Aldenburgh* habuit *Ulf* undecim carucatas terrae "ad geldam, ubi poſſunt eſſe decem carucatae: in Niwetone et "Scirelai et Totele ſunt duae carucatae terrae, et ſex bovatae "ad geldam, ubi poſſunt eſſe tres carucatae. Nunc habet "Drogo ibi unam carucatam, et quidam miles ejus, unam "carucatam, et quatuordecem villanos cum duabus carucatis. "Ibi centum acrae prati. Silva paſtura, quatuor quarentenae "long. et tres in latitudine [*i*]."

THE

[*g*] Archaeologia, vol. I. p. 173.

[*h*] Viz. Leſſete, Biworde, Fothingham, Burton, Settun, Riſtun, Thorp, Lapun, Bovington, and Bergetorp.

[*i*] Doomſday-Book, f. 324. The record goes on; "Ad hoc manerium (*Aldenburgh*) pertinet ſoca haec. *Wagene*, ſeptem caruc'. *Melſe* duae car'. *Beninccl* duae "car' et quinque bovat'. *Rugbaton* duae car'. *Scherle* quatuor car' *Dunsterp* tres car'. "*Meretone* duae car'. *Feſham* duae car'. *Biuinch* ſex car'. *Niwetone* una car' et "dimid'. *Ringbeburg* una car'. *Weſſum* duae car' et duae bovat'. *Totele* quinque car' "et

THE manuſcript quoted by Camden ſays, *Ulf* gave *all his eſtate* to God and St. Peter, i. e. I ſuppoſe, all he had a power to give, for there might be ſettlements which prevented his alienating the whole from his family, eſpecially to a religious foundation. Authors have given inſtances of traces of the mortmain act even amongſt the Saxons. Selden relates the following from the old book of Abingdon. "A ſervant of king Ethel-"red, called Ulfric Spot, built the abbey of Burton in Staf-"fordſhire, and gave to it all his paternal eſtate valued at "700 *l.* and, that his donation might be good in law, he gave "king Ethelred 300 marks of gold for his confirmation of it, "and to every biſhop 5 marks, and over and above to Alfric "archbiſhop of Canterbury the village of Dumbleton [*k*]." Or elſe a part of his eſtate might be under an entail; for we find in our earlieſt Saxon laws ſtrong marks of theſe limited conditional fees, which could not be alienated from the lineage of the firſt purchaſer [*l*].

"et ſex bovat'. *Otrige* dimid car'. Simul ad geldam quadraginta et una caru-"cata terrae, ubi poſſunt eſſe quadraginta carucatae."

"Nunc habet Drogo ibi duas carucatas et ſex ſochmannos et quatuordecem "villanos, et tres bordarios habentes ſeptem carucatas. Tres milites Drogonis "habent ibi duas carucatas, et duos villanos et tres bordarios. Ad eas adjacent "centum ſeptuaginta viginti et quatuor acrae prati. Totum manerium cum ap-"pendentibus novem leugae long. et ſex leugae et dimidium lat. Tempore regis "Edvardi valetat quadraginta libras, modo ſex libras."

It is remarkable that the church of *Aldburgh* is not mentioned in Doomſday-Book, which is alſo the caſe with that at Kirkdale ſome time ſince laid before the Society, though both muſt have exiſted prior to the ſurvey, as appears by the inſcriptions.

[*k*] Selden's Janus Anglor. l. ii. c. x. ſect. 45. p. 69. et Annales Mon. Burton.

[*l*] "Si quis terram haereditariam habeat, eam non vendat a cognatis haeredi-"bus ſuis, ſi illi viro prohibitum ſit, qui eam ab initio acquiſivit, ut ita facere "nequeat." Leges Aelfredi, 37. Wilkins, p. 43.

On some of these accounts it doubtless was that the whole of his fortune was not given to the See of York, and that some of it remained to his sons, who probably were deprived of the greatest part of their possessions at the Conquest; for, when the general survey was made, *Aldburgh* belonged to Drogo de Bevrere, to whom the Conqueror had given the whole territory of Holderneſſe [m].

This Drogo, or Drew de Bevrere, sometimes stiled from his estate Drogo de Heldreneſſe [n], was a Fleming, who accompanying William into England, and being a skilful and courageous man in arms, was rewarded by him with this estate, on which he built the castle of Skypsey [o], said to have been the strongest fort in all these parts [p]; but having afterwards killed a kinsman of the king's, he was constrained to quit the kingdom, and escaping to Flanders, king William bestowed the territory of Holderness upon Odo, earl of Champaigne, who had married Adeliza his sister [q].

Odo, earl of Champaigne, stiled also earl of Albemarle and Holderneſſe, had issue Stephen his heir, who succeeded to all his possessions, and was founder of the great monastery of Albemarle in Normandy, to which he gave many churches and estates in England, which had belonged to *Ulf* [r], and among others the tythes of his castle at *Aldburgh* [s], which shews that

[m] Doomsday-Book ubi sup. [n] Ib.
[o] Mon. Angl. vol. I. p. 796.
[p] Dugd. Baron. v. I. p. 60. [q] Ib.
[r] Wagene, or Wawn, Frothingham, &c.
[s] "Decimam de castello de Aldeburgo." Mon. Angl. vol. I. p. 588. No. 10. Not the least vestige of this castle now remains. Tradition says, it stood northward of the church; but an inclosure which took place at Aldburgh some years ago has quite levelled the foundations, and the well, which was within the castle and supplied it with water, is now in the high road. Ex informat. Rev. Will. Dade.

itt

it was a place of consequence in very early ages; and indeed there is reason to suppose that it had existence long before the time of the Saxons. The name, *Ealdburg*, *Burgus antiquus*, denotes its antiquity; thus the Isurium of Antonine, which has afforded such a treasure of Roman reliques [*t*], is now called *Aldborough*; and Camden says [*u*], that at the other place of that name in this county, *Aldburgh* in Richmondshire, situated on the Iter ad Vallum, near Cataractonium, many vestiges of large buildings might be discovered; which seems to shew that this name had been given by the Saxons to places of ancient note. In the plate of the Roman roads in Yorkshire, published by the Society of Antiquaries, the street, which is traced along the sea-coast, as leading from Praetorium to the Gabranticorum Sinus Portuosus vel Salutaris of Ptolomey, runs through *Aldbrough* [*x*]. From all which we may conclude, that it was known to the Romans, though history takes no notice of it in that light.

Stations when settled in a country are seldom changed. They are generally fixed upon at first on account of some excellence; and the superior degree of cultivation, and other conveniences of life which surround a place when once inhabited, generally tempt the successors of a conquered people to retain them. Thus many of the known Roman stations in this island are now capital towns; the Saxons succeeded the Romans, and were succeeded by the Normans; and it is probable that *Ulf* made *Aldbrough* his chief residence in the province of Deira, from its having been anciently a place of note and strength. It is evident that Stephen, earl of Albemarle, who succeeded Drew

[*t*] Drake's Eboracum, p. 12.
[*u*] Britan. by Gibson, v. II. p. 12.
[*x*] Vol. I. N° 47. Drake's Ebor. p. 36.

de

de Bevrere, had a castle here. Drew built the castle of Skipsey, which is within a few miles of *Aldburgh*, and is expressly said to have been the strongest fortress in all these parts [y]. It is not probable that either of these successors to the estate of *Ulf* would erect a place of inferior strength to the other, which was so near it; whence we may conclude, that Drew, upon entering on the estate of *Ulf*, not finding his castle of *Aldburgh* of sufficient strength, built that of Skipsey, that he might be the better enabled to repel the incursions of the northern nations, who frequently landed from the continent on the Yorkshire coast; and that *Aldburgh* had before been the capital mansion of *Ulf* in these parts, which he chose particularly to distinguish, by piously erecting a church there, for the repose of the souls of two of his friends, *Hani* and *Gunthard*.

What relation these two persons, mentioned in the inscription, bore to *Ulf*, does not appear. We find names partly similar to the former in use with the Saxons [z]. Gunthard was probably some particular friend, for it appears from the general survey that he then held a manor in the neighbouring lordship of *Rimeswell* of Drogo de Bevrere [a].

The very liberal alienation which *Ulf* had made of his property to the See of York, and the seizure of most part of the rest at the Conquest, probably reduced his sons to a very different situation of life from that enjoyed by their father, who, we are told, was *Consul et insignis comes* [b]. One of them, named

[y] Dugd. Baron. v. I. p. 60.

[z] Catalogue of the coins of Canute, p. 18.

[a] "In Rimeswelle habuit Ode quinque carucatas terræ, et duas bovatas ad "geldam, ubi possunt esse quinque carucæ. Nunc Balduinus et *Gunardus* ha- "bent de Drogone. Ipsi (habent) duas carucatas, et viginti acras prati, una "leuga long. et una lat. Tempore regis Edvardi valebat sexaginta solidos, modò "quadraginta solidos." f. 324.

[b] Cod. MSS. Bibl. Cotton. Cleopatra, N° II. cap. iv. p. 25.

Styr, or *Stirre*, is called, by Simeon of Durham, *Civis dives* [c], which probably might be from the possessions he enjoyed in the city of York, the capital of these northern parts, and where he had many houses, as appears in Domesday-Book [d]; and these possessions which *Styr* held in the city of York, were probably what afterwards the See of York enjoyed there, and which in ancient inquisitions is called *Terra Ulfi*, from having been the estate of *Ulf* his father [e].

THE other son of Ulf, who was called *William*, in after-times found such favour with the crown, that Henry I. made him a very liberal grant of lands in the province of Deira, and in the neighbourhood of his father's estate in the East-Riding; the deed by which this was done, taken from a copy of the original, remaining in the time of queen Elizabeth, with the royal seal appendant, amongst the evidences of the lords Dacre of the north, is here given at large.

[c] Cron. Sim. Dunelm. col. 80, n. 21.

[d] In Eboraco Civitate.

" Comes de Moritonio habet ibi quatuordecim mansiones et duos bancos in ma-
" cello, et ecclesiam Sancte Crucis. Has recepit Osbernus filius Bozonis, et
" quicquid ad eas pertinet. Hae mansiones fuerunt horum hominum, Sonulfi 1,
" presbiteri 1, Morulfi 1, *Stirri* 1, &c." Et postea, " Waldinus intercepit duas
" mansiones Ketel presbiteri, pro una mansione *Sterre*, &c." f. 298.

[e] Archaeologia, vol. I. p. 179. Drake's Ebor. It is worthy of observation that the magnates or tenants in capite in the reign of the Conqueror had most of them houses in the capital city or town of the county where their possessions lay, which we may conclude were town residences for them during the winter, or to be near the Curia Comitis; and this gives us a much higher idea of the polished manner of living of our Saxon ancestors than has been imagined. Of the twenty-eight tenants in capite in the county of York, mentioned in Doomsday-Book, twelve of them had houses in the city of York; of which some of those that belonged to William de Percy, the residence of whose family in Walmgate was called *Percy's Inne*, still belong to his descendent the present earl of Egremont.

" HENRICUS

" HENRICUS rex Angliae, archiepiscopo Eboraci, &c. salu-
" tem. Sciatis me concessisse *Willielmo* filio *Ulfi*, et haeredibus
" suis post mortem ejus, in feodo et haereditate, terram suam
" de *Fangefosse*, et de *Thorpe*, et de *Meltemebia*, et de *Gevel-*
" *dala*. Tenendam de me pro quatuor libris inde reddendis mihi
" per annum. Testibus, Roberto de Ferrariis, et Waltero
" Espec, et Rogero de Valoniis, et Fornone filio Sigulfi. Apud
" Nottingham [*f*]."

THIS William seated himself at Grimethorpe near Pocklington in the wapontake of Harthill, and had issue Ralph his heir, whose posterity continued at the same place, and were esteemed of the rank of barons, bearing some time the name de Grimethorpe from their residence; at others, that of Fitz-William, from their ancestor, *William*, son of *Ulf*; till in the thirteenth century they assumed the name of Greystock for the estate of that family in Cumberland, which descended to them from John lord Greystock [*g*].

IT

[*f*] Vinc. N° 59 in Colleg. Armor.

[*g*] In the reign of Henry III, Ralph Fitz-William de Grimethorpe married Joan, daughter of Thomas, lord Greystock, and had issue William, father of Ralph Fitz-William de Grimethorpe, summoned to parliament from 23d of Edward I. to 9 Edward II. inclusive. (Dugd. Sum. ad Parl. p. 11, et postea usq. p. 102.) On this Ralph, John lord Greystock, his cousin, or nepos collateralis of his grand mother, having no issue or relations of the male-line, settled the manor and barony of Greystock in Cumberland, and all his estate, on condition he should found a college in the church at Greystock, (Dugd. Baron. v. I. p. 740. Vinc. N° 59. p. 256, in Coll. Armor.) for which donation Edward I. granted his licence dated at Odymor in France, 17 August, 25 of his reign, 1297, the said Ralph being then in his service beyond sea. (Vide Exemplar Chartae Vinc. N° 59. p. 257, ut supra.) And John, lord Greystock, dying in the 34th year of the same reign, (Esch. 34 Ed. I. N° 40. Claus. 34 Ed. I. m. 2.) he accordingly entered into possession, and assumed the name of Greystock, but retained the Grimethorpe arms, as was formerly usual; for in early times, before the use of autographs, and when seals were the only evidence, we find our ancestors were much more tenacious of such ensigns than of their nominal appellation; thus Joseline de

IT may be obſerved, that in thoſe manors poſſeſſed by *Ulf* in the Eaſt-Riding before the Conqueſt, *Settun* is mentioned: "*In* "*Settun, Ulf et Siuargert habuerunt, tempore regis Edvardi, ſex* "*carucatas terrae et dimidiam ad geldam, et ſex carucae poſſunt* "*ibi eſſe, &c.*" [*b*] and it appears in the inquiſition taken after the death of William, lord Greyſtock, his lineal heir male, who died on the feaſt-day of St. Margaret, 20th July, 32 Edward III. 1352, that he died ſeized (inter alia) of the barony of Greyſtock, and the manors of Grimthorpe and *Seton* in the Eaſt-Riding of Yorkſhire [*i*]; by which it ſeems, that this eſtate was ſo ſettled, that *Ulf* could neither alienate it from his poſterity by giving it to the See of York, nor the Conqueror legally ſeize it, but that it continued in the male-line. Several authors have endeavoured to prove, that the ſettlement of the crown of England on William I. was by the general conſent of the people, and not by force, and that he came not to deprive the Engliſh of their rights, but to diſpoſſeſs thoſe who unjuſtly were enjoying any land to the diſheriſon of the king and his crown; and we find this opinion prevailed in very early ages, when

Louvain, though a deſcendent in the male line from the Carlovingian or ſecond race of the kings of France, upon his marriage with the heireſs of Percy, choſe rather to aſſume her name than change his own arms. But in after-times, when the mode of quartering arms took place, the lords Greyſtock of the Grimethorpe family quartered ancient Greyſtock with their paternal coat; and one of them on his ſeal ſignificantly placed the cuſhion, the cognizance of the Greyſtocks, within the chaplet of Grimethorpe, alluding to the merging of the eſtate of the former family in the latter; as appears by ſundry ancient deeds amongſt the evidences of the earl of Surrey, who is the preſent poſſeſſor of the manor and barony of Greyſtock, by deſcent from Ralph Fitz-William of Grimethorpe.

[*b*] Doomſday-Book.

[*i*] Eſch. 32 Edw. III. N° 43.

much

much better evidence remained of the fact than we can now poſſibly have [*k*].

The ſtory of Edwin the Saxon related by Spelman is well known; who being, before the Conqueſt, poſſeſſed of the caſtle of Sharnborne in Norfolk, William gave it to Warren, a Norman; on which Edwin comes into open court, and before the king demands his right, tells him it did, *de jure*, belong to him, upon this reaſon of law, for that he had never taken up arms againſt the king, either before his arrival or ſince; whereupon the king, *vinculo juramenti aſtrictus*, gave judgment of right againſt the Norman, and Edwin recovered the lordſhip [*l*].

Many other inſtances of a like tendency are related by Mr. Petyt in his *Ancient Rights of the Commons of England aſſerted*, and by Atwood in his *Jus Anglorum ab Antiquo*; and indeed it is not poſſible to ſuppoſe that ſo numerous a people as the Anglo-Saxons were would have ſuffered themſelves to be held in ſubjection by the ſmall force the Norman brought hither, if the conſequence was to be a total deprivation of their property. The end of all government is the benefit of the people, and wiſe and wealthy men in all ages have been for ſupporting that power which could beſt protect their property, and of courſe have been averſe to revolutions, which in civilized ſtates have generally been brought about by the profligate and needy; the Saxons had long ſuffered by a divided Heptarchy, and under the Danes and wiſely conſidered, that it was better policy to part with a ſmall portion of their property to William, in order to add ſtrength to his arms for the protection of the reſt, than by

[*k*] "Le Conqueror ne vient pas pour ouſter eux, qui avoient droiturell poſſeſ-
" ſion, mes de ouſter eux que de lour tort avoient occupie aſcun terre en deſherit-
" ance del Roy et ſon coronne." Argumentum Anti-Normanicum, p. 63. Joh'es Shardelowe, unus Juſtic. de Banco, 16 Ed. III.

[*l*] Spelman's Gloſſ. verbo Drenches, p. 184.

an imprudent opposition endanger the whole. Indeed, it may be said, that when the general survey was made, the Normans were the only tenants in capite, which, except in a few instances, is true; but this tenure seems to have been more honorary than beneficial, and the real property of the land to have been vested in the Valvasors, who held under them, and were chiefly Saxons; the Magnates, or superior lords, seem only to have received a small acknowledgement, and to have superintended those districts, which they are in Doomsday-Book said to have held of the king [*m*]. And in the course of my researches in these subjects, various instances have occurred, not only where the Saxons possessed lands before the Conquest, and held the same of a Norman as tenant in capite after; but where they have been deprived of an estate in one place, and had a much larger given in another; where those who had none before had estates granted, and where their posterity inherit the same by descent at this day. From all which we may conclude, that the entrance of William I. into this kingdom was more by compact with the people, than by conquest with the sword; and that, as he did not come to abolish the Anglo-Saxon laws, it is probable that *William*, son of *Ulf*, enjoyed the manor of *Seton* by hereditary right, which descended to his posterity, the Grimethorps.

THE family of the lords Greystock continued to flourish till the reign of Henry VII, when Ralph, the last baron, died, 1st July, 1487, leaving Elizabeth, his grand-daughter, daughter

[*m*] Aluric, the son of Richard Aschenald, a Saxon, possessed the castle of Kirkby, or Pontefract, before the Conquest, as appears in Leland's Itinerary, which being a place of strength, fit to protect the northern parts, William gave it to Ilbert de Lacy, one of his followers; yet this Aluric, and Swein his son, held a vast estate under Ilbert at the time of the general survey, of which some of their descendents possess parts, as heirs-general, at this day.

of Sir Robert Greyſtock, knt. his eldeſt ſon, who died in his life-time, his heir; which Elizabeth married Thomas, lord Dacres of Gilleſland, and died 13th Auguſt, 1516, ſeized, as appears by inquiſition, of all thoſe manors which Henry I. granted to *William*, ſon of *Ulf*, her anceſtor, viz. Grimethorpe, Fangfoſſe, Meltonby, Givendale, and many others [*n*]. She had iſſue William lord Dacres; whoſe grandſon George had two ſiſters his coheirs, Anne, married to Philip Howard earl of Arundel, eldeſt ſon of Thomas duke of Norfolk; and Elizabeth, to lord William Howard, his younger brother, between whom the immenſe eſtate of their brother was divided: Anne had the baronies of Greyſtock in Cumberland, and Wemme in Shropſhire, &c. and Elizabeth the great barony of Gilleſland in Cumberland, and the ancient Grimethorpe eſtate in Yorkſhire, of which Hynderſkelfe caſtle near Malton was the head, where of late the fine ſeat called Caſtle-Howard has been built. From Anne, the barony of Greyſtock deſcended to the right honourable the earl of Surrey, eldeſt ſon of the duke of Norfolk, who is the preſent poſſeſſor; and from Elizabeth deſcended Charles-Frederic Howard, earl of Carliſle, who, I am told, is poſſeſſed of ſome of the before-recited manors, which Henry I. granted to *William* ſon of *Ulf* [*o*].

[*n*] A. 8. p. 335. in Colleg. Armor.
[*o*] Ex informat. Rev. W. Dade, Rector. de Barmeſton.

I am, Sir, your moſt faithful,

humble ſervant,

Herald's College, London,
Feb. 16, 1778.

J. C. BROOKE.

IV. *Account*

IV. *Account of a singular Stone among the Rocks at* West Hoadley, Sussex, *by* Thomas Pownall, *Esq.* F. S. A. *and* F. R. S.

Read March 18, 1779.

SIR,

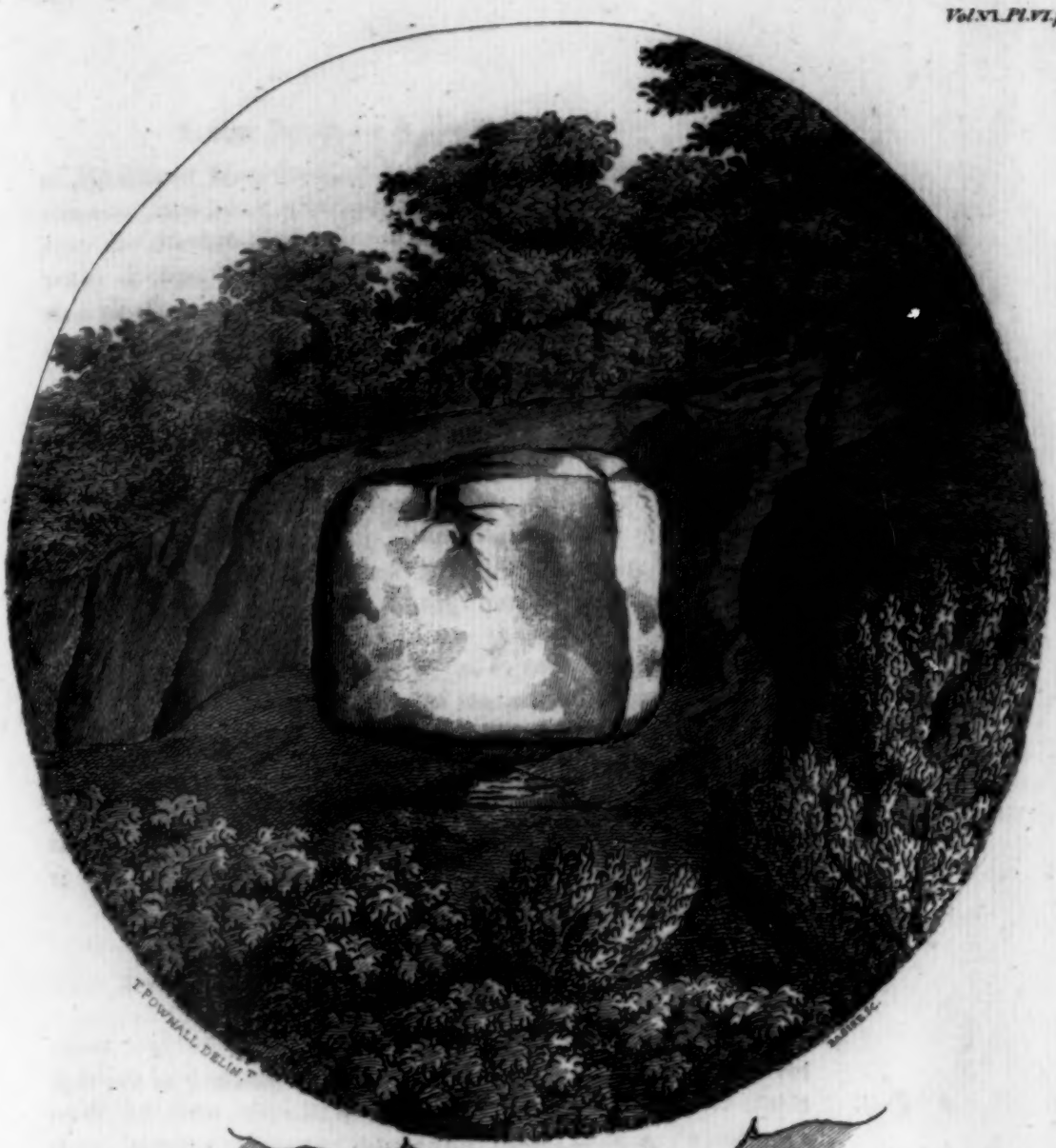
THE curious particulars which you had heard of, and had communicated to me, respecting the great pensile-Rock at West Hoadley, in Sussex, (called by the people *Great upon Little*), raised my curiosity, and determined me at a leisure day to make an excursion to view and examine it.

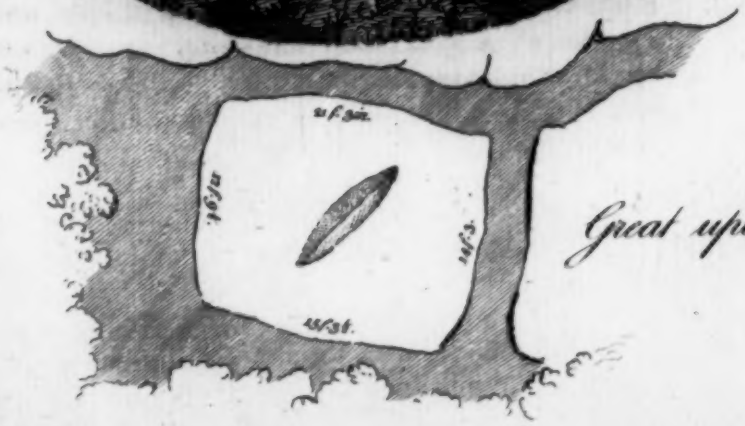
THE following description confined to the simple fact of the object, with a portrait and plan [*a*] of it, is very much at your service: and although I have subjoined some sentiments of an opinion which I have, from repeated views of these sorts of things, formed in my mind; yet I send them not as giving mine but with design to elicit your opinion.

IN the parish of West Hoadley, about three or four miles south of East-Grinsted, the ground in many places rises in high ridges with craggy cliffs. About half a mile west of West Hoadley church, there is a high narrow ridge covered with wood. The edge of this is a craggy cliff composed of enorm-

[*a*] See Plate VI.

ous


T. POWNALL DELIN.
BASIRE SC.


Great upon Little.

ous blocks of ſand-ſtone. The ſoil hath been intirely waſhed from off them, and in many places from the interſtices by which they are divided. One perceives theſe craggs, with bare broad white foreheads; and as it were, overlooking the wood which cloaths the valley at their feet. In going to the place I paſſed acroſs this deep valley, and was led by a narrow foot-path almoſt trackleſs, up to the cliff, which ſeems as one advances to hang over one's head. The mind in this paſſage is prepared with all the ſuſpended feelings of awe and reverence; and as one approaches this particular rock ſtanding with its ſtupendous bulk poiſed, ſeemingly in a miraculous manner, on a point, one is ſtruck with amazement. The receſs in which it ſtands hath, behind this rock, and the rocks which ſurround it, a withdrawn and recluſe paſſage, which the eye cannot look into but with an idea of its coming from ſome more ſecrete and holy adyt. All theſe circumſtances in an age of tutored ſuperſtition would give even to the firmeſt minds the impreſſions that lead to idolatry. The rock which ſtands thus poiſed upon the edge, almoſt upon the point of another which appears juſt above the ſurface of the earth, is a prodigious maſs. It is a parallelopipedon, whoſe height is about twenty feet, and whoſe ſides are as follows:

	feet.	inches.	
1ſt	14	3	
2d	15	3 ½	
3d	19	9 ½	
4th	21	3	63—7 total.

It is not as you may imagine exactly regular, and has therefore been differently eſtimated from 487 to 500 tons weight: from the meaſurements and paſſing obſervations which I made, accept the encloſed as a rough ſketch of its plan, and of its poſition reſpecting the other rocks on which it ſtands. I alſo

ſend you incloſed a view of it, which I compoſed from ſeveral views taken as I could ſketch them out from different ſtations on the ſpot. It is upon the whole ſuch a one as will give you a pretty exact idea of the rock, its poſition, and ſituation [*b*].

ALTHOUGH it had been repreſented to you as an ancient druid monument, I was not led towards it on that conſideration. I am not decided to refer indiſcriminately at all times theſe ſtupendous objects to the Druids and their ſyſtem only. Whatever may be the impreſſions which theſe appearances at firſt make as effects of ſuperior art and ſomething above nature, they will often be found to be the mere effects of natural accidents.

THESE phaenomena however carrying in their features the marks of ſome operation, ſome activity other than the ordinary courſe of nature, and in the ſtupendous ſcale of their magnitude ſomething beyond any experience of the powers of man, have naturally led minds prepared for ſuch impreſſions to the idea which has been commonly expreſſed by the word *magic*. In leſs civilized or leſs enlightened ages they have led to actual idolatry. In ages wherein men, beginning to grow learned, affect, as the proverb expreſſeth it, to ſee further into a millſtone than the vulgar eye doth, the ſame impreſſions have exactly in the ſame manner led to an opinion, that theſe objects and their circumſtances muſt have been the holy places and the conſecrated idols of ſome former religion. But unleſs I find ſome concomitant external circumſtances which evidently mark the hand or the veſtiges of man, I have always remained in doubt as to the internal evidence of their religious origin or conſecration. I muſt own, at the ſame time, that the air of myſtery and ſupernatural power which ſurrounds theſe objects naturally forms the mind to a ton of religious fanaticiſm, which it is not in the power of

[*b*] See Plate VI.

the

the human breaſt not to feel, and from theſe notions they have commonly and too indiſcriminately been ſuppoſed to have been religious and ſacred monuments, and in particular to have been thoſe of the druid ſuperſtition. But I own that I differ from this opinion as to this object. In the firſt place the eaſtern parts of this iſland were not much frequented by the Druids: on the contrary, it was invaded and poſſeſſed by the Wicanders of the north-eaſtern people, Saxons, &c. in much earlier periods of time than our common vulgate hiſtories take notice of. Theſe people had their rock monuments, both civil, religious, and ſepulchral, of the moſt ſtupendous magnitude, as well as the Druids. If therefore theſe kind of objects in theſe parts are to be referred to any interpoſition of ſuperſtition, why not to that of theſe people? There are in theſe parts many remains which are evidently and deciſively theirs; but there is another origin to which they may be referred, I mean a purely Britiſh ſuperſtition, in which the miſſions of the Druids had no interpoſition. The Britons worſhiped the ſpirit of fury or revenge under the name of *Andraſt*, and ſacrificed the human being to this idol. The great wild of this county was ſacred to her, and was called in the Britiſh tongue *Coit-Andraed*, which the northern people tranſlated, and named in their languages *Andraſt-wald* and *Andred-beida*, corruptly written *Anderida*. If this great ſtone was ever any idol, why not the bloody rock Andraſt? But without any reference to any of theſe ſuperſtitions, I am apt to conſider many of theſe objects as mere natural phaenomena, whoſe ſtate in which they are found may be eaſily explained from the common operations of nature acting on the circumſtances amidſt which they are found.

These great penſile, poiſed, rocking ſtones, or piled maſſes of rocks, are almoſt always found on the edges of craggy cliffs, or on the mountainous ſides of rocky ground; where we ſee

how the wear and tear of time operates in ſuch places, how the beating of ſtorms, and waſh of rains, for ages, have cleared away the earth from amidſt the blocks and ſtrata of theſe rocks, and left them bare, and many of them *iſolées*, almoſt exactly as we now find them. We need refer to no other cauſe for theſe effects in the firſt inſtance; yet I do allow, on the other hand, that the interpoſition of man may have carried theſe operations further on ſome of theſe objects, than what nature would have given. After the common operations of nature (having worn and waſhed away the earth) may have laid open ſome of theſe ſtrange appearances, I can ſuppoſe that man may have carried this effect ſtill further by totally clearing away all the remaining ſoil that ſurrounded theſe marvellous phaenomena: that either prieſts profiting of their ſupernatural appearance, and having deſtined them for conſecration, did thus work them up to a kind of miracle; or that the common inhabitants of the diſtrict [*b*] without any ſuch deſign, or any deſign at all, have from mere curioſity, following an extraordinary appearance which ſtruck them, done the ſame thing, by clearing away every thing which ſurrounded them, and leaving them thus naked and *iſolées*. Cattle alſo getting into the excavations of ſuch craggs will naturally looſen the ſoil about them, and render it more liable to wear and waſh away. There is by the road ſide, which leads to Weſt Hoadley, a very great rock, of dimenſions much larger than thoſe of the ſubject of this letter, from under which, and from every ſide of which alſo, except one corner which remains ſtill inſerted, the earth hath been waſhed away; this alſo reſts upon a point, and with its enormous projection forms a cave, under whoſe ſhade and ſhelter the cattle find a retreat from heat and weather.

[*b*] That this great and extraordinary ſtone has engaged the marked attention of the common inhabitants for many ages back, may be ſeen by multitude of names, and initials of names, of all dates cut in every part of it.

I HOPE

I HOPE you will not conceive that I mean to account for the edifices and erections which the great *cathedral-temples* and *conventual-dwellings* of the Druids exhibit from theſe kind of accidents or aidings. I have, on the contrary, the moſt confirmed perſuaſion that the prieſts of theſe miſſions had in uſe a power of mechaniſm, not only beyond the conceptions of the ignorant people, amongſt whom they dwelt, as above the human power, and therefore from the appellation of the ſociety called *Magick*, but alſo above any thing (one inſtance excepted [*c*]) which modern practice knows. At the ſame time I do believe, that many of the leſſer holy places, the *chapels* and *tabernacles* of private prieſts, many of the crom-lecks, kiſtvang, logan ſtones, judgment ſeats, oracular and ſepulchral ſtones, have been applied and conſecrated to theſe ſeveral purpoſes from the ſuggeſtions which nature, who had in part given them their form, prompted. And I make no doubt if the Druids had reſided in theſe parts, but that they would have adopted and conſecrated this our *Great upon Little*, as one of their myſterious

[*c*] I refer here to the moving and tranſporting near forty miles the great granite rock, deſtined for the pedeſtal of the ſtatue of the Zar Peter the Great. This rock, whoſe weight is 1200 tons, was found ſunken in a ſwamp. The Count Carbars, of Ceffalonia, raiſed it out of this ſwamp, drew it upon rolling balls ſeveral miles by land. Then embarked it on a float, conducted down to Peterſburg between two ſhips, and again diſembarked it. The various difficulties he met with ſeemed unſurmountable; the various different operations which this ſtupendous work required, would really, had not this inſtance proved the contrary, have appeared to this day impracticable and impoſſible. The Count however, from a principled ſcience in mechanics, which I do not believe any other man poſſeſſes, planned ſo ſimple a proceſs of operation as was ſuperior to all difficulties. If any thing could exceed the plan and conduct of this enlightened ſcience. The quickneſs and application of thoſe reſources, by which he repaired and overcame all accidents which occurred in the execution, did ſo, as far as my reading goes. This work appears to me not only the greateſt operation of mechanics which was ever effected in our world, but unique.

rocks, one of their ſymbols of the Numen, whom they taught the people to worſhip. Other prieſts alſo of the northern people might have done the ſame. The object itſelf would *inſpire*, and the nature of the place where it is found would *conſpire* to this imagination.

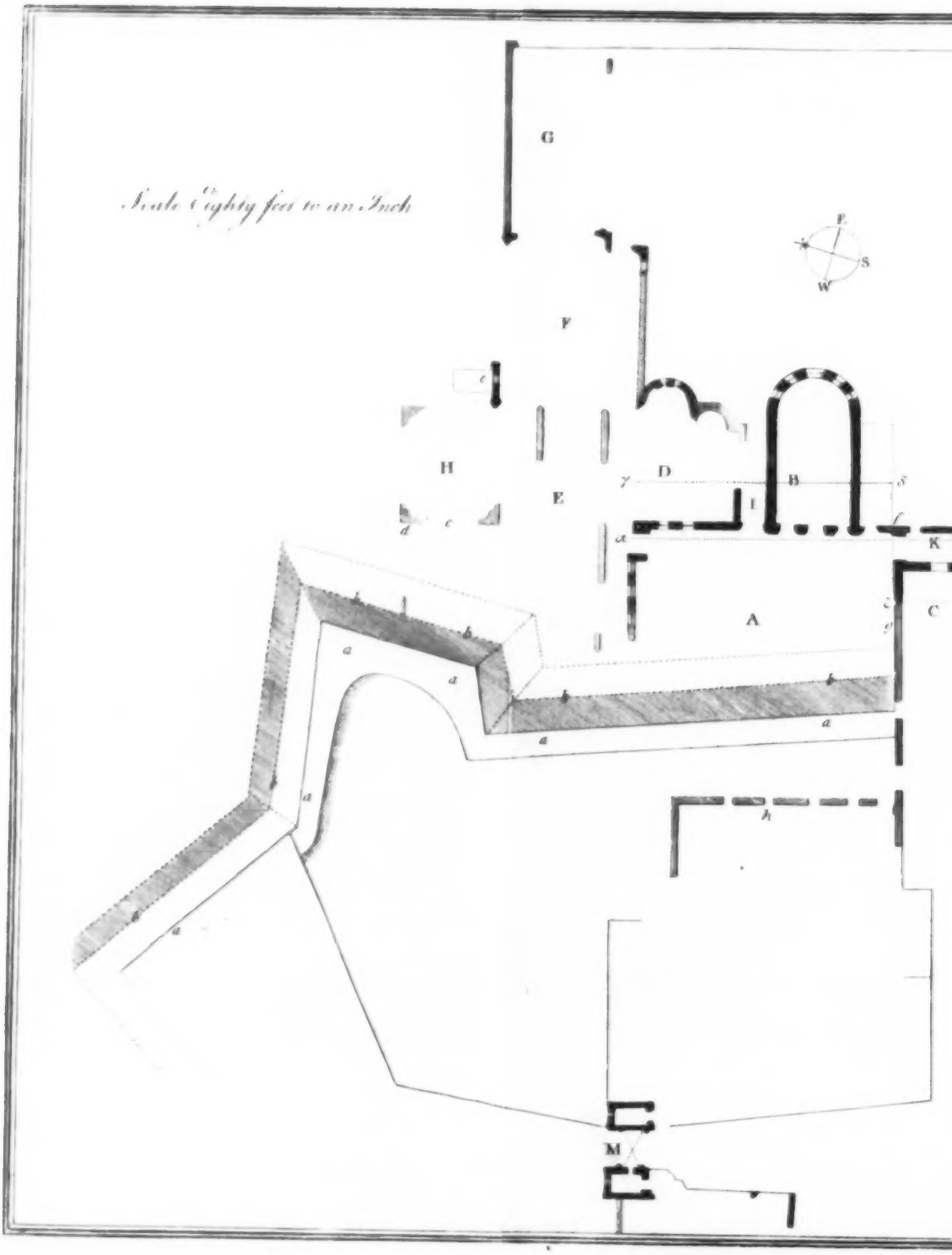
I COULD not, whilſt I was upon the ſpot, hear of any other particulars than what I have beforementioned. After I was come away, I was told of a cave ſome where thereabouts, where a broom-maker had lived for many years. Perhaps it may become a days amuſement to you, as this was to me, to go and ſearch it out, and examine it.

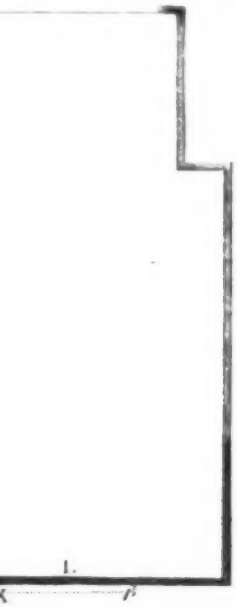
I am, Sir,

Your moſt humble Servant,

T. POWNALL.

V. *Obſervations*


Scale Eighty feet to an Inch
G
F
H
E
D
B
I
K
A
C
M
E
S
W



General Plan of the Ruins of READING ABBEY,

Surveyed by

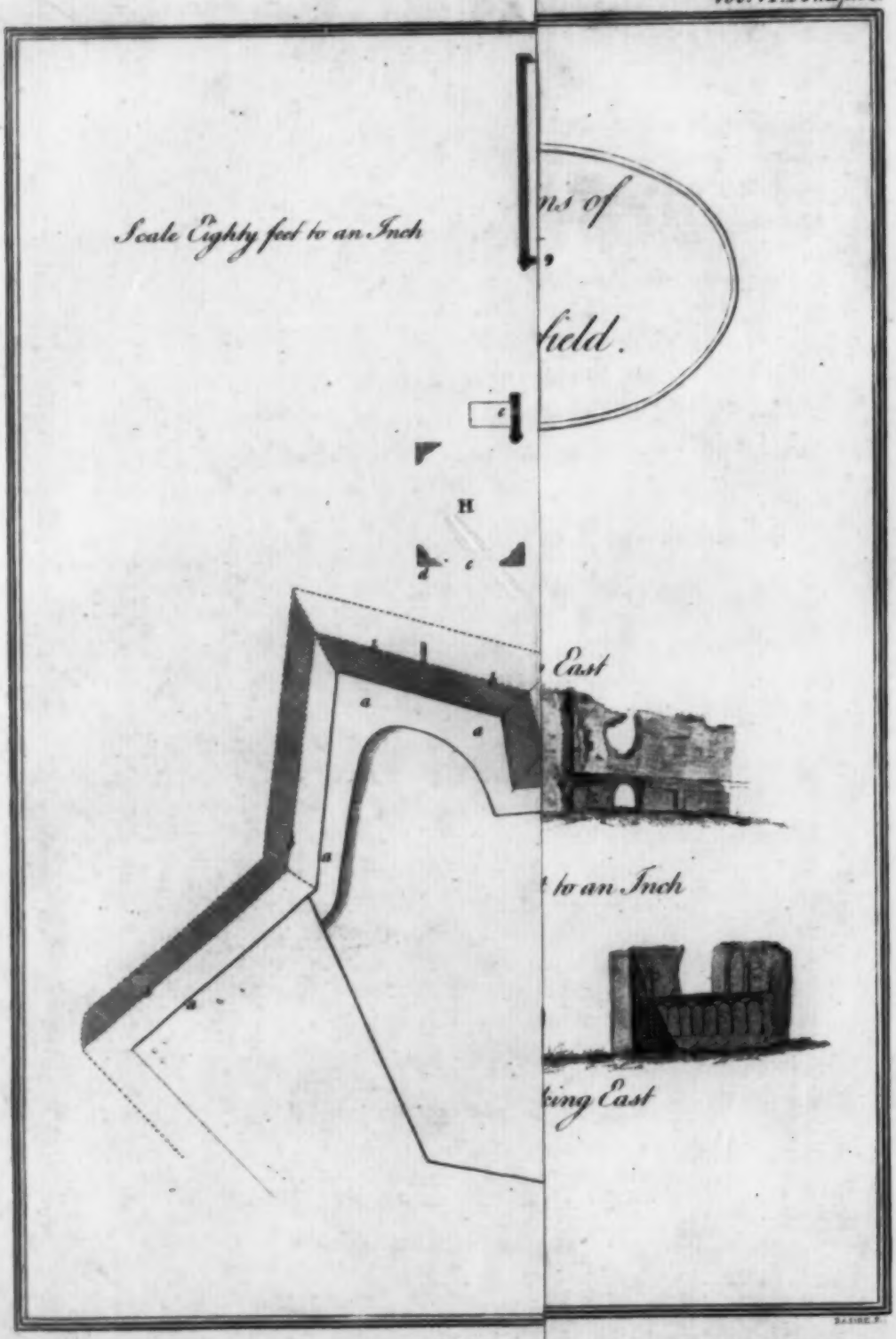
Sir Henry Englefield.

Feb.y 1779.

Section through the Line α β looking East

These Sections are to a Scale of 40 feet to an Inch

Section through the Line γ δ ε ζ, looking East


Scale Eighty feet to an Inch
ns of
,
ield.
H
East
to an Inch
ing East

V. *Obſervations on* Reading *Abbey, by Sir* Henry Englefield, *Bart.* F. S. A.

Read May 13, 1779.

THE abbey of Benedictine monks at Reading, founded in the year 1121 by Henry the Firſt, rendered ſtill more famous by his and the empreſs Maud's burial there, was ſecond to few in this kingdom in its wealth, honours, and magnificence. The number of its religious was two hundred; and their abbot, who was a peer of parliament, gave place only to thoſe of Glaſtonbury and Saint Albans. His abbey anſwered in ſtatelineſs to the rank and conſequence he poſſeſſed; and a proof of that is, that parliaments and councils have more than once been held in the great hall of the abbey. The ſhattered and diſjointed ruins of the building, which now remain, bear a character of majeſty very ſingular and almoſt peculiar to themſelves. Stript by deſtroyers of more than ordinary patience and induſtry, of almoſt every ſtone which caſed the walls, they ſtill, though built only of ſmall flints, defy the injuries of time and weather, and have more the appearance of rocks than of the works of human hands. My reſidence in the neighbourhood has given me frequent opportunities of examining theſe ruins, and the plan [*a*] and drawings now preſented to the inſpection of the Society are the reſult of my enquiries. I make no apology

[*a*] See Plate VI*.

for this communication; it has long appeared to me, that a number of ſurveys of the different abbies and cathedrals of this kingdom would be a fund of valuable information for thoſe who ſtudy the hiſtory of architecture in England. With this view principally I have made this ſurvey. If any uſeful information can be drawn from it, my end is anſwered.

THE abbey is ſituated on a ſmall gravelly eminence, hanging over the river Kennet on the ſouth, and to the north commanding a charming view of the Thames and its oppoſite elegant ſhores. On the weſt it joins the town; and to the eaſt looks over fine meadows to the junction of the two rivers. Its ſcite was therefore dry, airy, and has an unlimited command of water, one branch of the Kennet running either in, or very near the precinct, and turning the abbey mills, which ſtill remain nearly entire, a very curious ſpecimen of the magnificence of the reſt of the building. They are too far off to be ſhewn in the plan. On entering the ruins from the Forbury (a Green known from time immemorial by that name), the firſt ſtriking objects are two immenſe maſſes of wall pitched with violence endways into the ground, as if by the force of powder. Advancing further amongſt heaps of proſtrate walls, the north ſide of the cloiſter appears, and, eaſt of that, the remains of a ſingular ſemicircular bow, marked (D) in the plan. South of that, and ſeparated from it by a paſſage arched two ſtories high, is the great hall, once moſt probably the chapter houſe, open to the cloiſters by three ſemicircular arches, with a window over each, and terminated to the eaſt by a ſemicircle with five large windows in it. It is now difficult to ſay, whether or not the windows were round-headed; they have much the appearance of an obtuſe point, as have all the other windows remaining in the abbey, though the doors are every one round. The hall, though forty-two feet by ſeventy-nine, was vaulted with one ſemicir-

cular arch from wall to wall, apparently with ſtone ribs, and the intervals filled up with a very curious ſubſtance, of which a ſpecimen accompanies this. All thoſe vaults which were to bear nothing were turned with this, which is evidently a tophus formed by ſome petrifying ſpring, and encloſing the impreſſions of twigs, &c. One leaf is very fair. This ſubſtance is very ſoft and extremely light, bearing only the proportion of 66 to 161 of Portland ſtone.

FROM what place this tophus comes I have not the leaſt gueſs. Several people have thought it a fluid mortar run on the vault, but the ſlighteſt inſpection refutes that ſuppoſition, as it is all ſquared and laid in regular courſes. This attention to lightening the vaults is, as far as I know, peculiar to this building, and is probably taken from the Roman architects, to whoſe ſtyle indeed the whole appearance of this noble hall is ſtrikingly ſimilar, recalling to the mind the baths of the emperors rather than a Gothic abbey. Going ſouthwards round the outſide of this building, we came to a ſmall door, and near it the remains of a ſtair-caſe. The door opens into a dark paſſage, once vaulted, and communicating with the cloiſters by a great door. The area of the cloiſters is now a garden; the north and eaſt walls have been deſcribed. On the ſouth ſide is a great room, once probably the refectory, acceſſible now only through Mr. Clement's houſe, its door of entrance into the cloiſter being walled up. This room is thirty-eight feet wide, by at leaſt ſeventy-two long, and has been highly ornamented with a row of interſecting arches, and above that a ſort of arcade running round it. The hollows in the wall, of the lower ornament, only remain; but the whole end of the room bears its ancient ſtone work in the upper order, and is the only ſpecimen of the ſtyle of this building. The arches are rather of a ſingular form; but the manner of their evading the indefatigable

deſtroyers of the abbey is really intereſting. Subſequent to the original building ſome alterations were made in this room when the arcades were filled up flush, and the whole wall ſtuccoed flat. Under this diſguiſe the arches eſcaped, and now the injuries of time having peeled off the plaſter and looſened the filling up, the arcades after a concealment of perhaps five centuries are once more reſtored to view. That this was the refectory may be conjectured ſtill further, from the appearance of the cloiſter wall which has two neat ſtone cupboards wrought in it, and between them a rough foundation, probably of the lavatory to which the cupboards belonged, for the reception of the neceſſary towels &c.

THE refectory (if I may be permitted to call it ſo) bears no marks of ever having been vaulted. The weſt wall of the cloiſter is ſtill about ten feet high in its whole length, and has ſeveral doors in it, great and ſmall, leading probably to ſmaller offices, over which was the dormitory. This at leaſt was the caſe in moſt abbies, and the plan of the abbey (now cathedral) of Durham is ſo ſtrikingly ſimilar, as almoſt to appear the ſame building.

IT muſt ſeem ſingular that I ſhould not have mentioned the church, which in ſo vaſt a pile muſt undoubtedly have been of equal magnificence and ſolidity; but ſuch has been the care taken to deſtroy it, that nothing but a very diligent ſearch could have led me to a determination even of its ſcite. The plan will ſhew how very ſmall the remains of it are; from their ſituation however, north of the cloiſters, (the uſual diſpoſition of our churches,) and the ſize of the area encloſed by the foundations, I can have no doubt of their former uſe.

THE dimenſions of the church as deduced from theſe remains are as follow:

Eaſtern

	feet.	feet.	
Eaſtern chapel	102 long,	55 broad,	These meaſures are clear within the walls.
Choir	98	34	
Side aiſles		19	
Tranſept	196	56	
Nave probably	215		

I ſay probably becauſe the weſt end of the church is now entirely deſtroyed, and in its place a large and high rampart croſſes the whole ruin through the cloiſter court, and ends in a ſort of horn work, commanding the Thames and its meadows northward, as in the plan. The meaſure I have adopted brings the weſt front to range with the cloiſters as it uſually does.

SHOULD that have been the caſe, the extreme length of the church was about 420 feet; its breadth, excluſive of the tranſept, 92. The bow window, mentioned before to exiſt eaſt of the cloiſters, was probably a chapel in the ſouth tranſept. There is a circumſtance which is really very ſingular in the diſpoſition of the walls of the church; that is, that the ſide ailes ſeem to have been ſeparated from the reſt by continued walls, which ſtill are in ſome parts three feet above the turf; this indeed I cannot account for, and this alone would have led me to doubt of the church having ſtood as I have deſcribed, did not the whole form anſwer ſo well as to preclude any other deſtination to theſe ruins. I ſubmit the whole to the judgement of the more learned members of the Society.

NEAR where the north tranſept joined the nave, a hollow remains in the earth, where almoſt certainly a mine was ſprung, which reduced the church to an heap of ruins, and pitched thoſe vaſt pieces of wall beforementioned into their preſent very ſurpriſing ſituation. Nothing now remains to be noticed, ſaving the outer wall of encloſure, and the great gate of the abbey which ſtill remains almoſt entire. The gate is of that ſemi-

ſaxon ſtyle which ſeems to prevail over moſt parts of the building, with pointed windows, and the arches of the gate round, all but one, and that very obtuſe; yet, if conjecture might be hazarded, I ſhould ſet it ſomewhat later than the body of the building, which had Saxon ornaments profuſely beſtowed on it, as is evident from the ſtones worked up in ſeveral modern walls, whereas the gate has no ornamented mouldings whatever. Many perſons now living remember its battlements. The outer wall of encloſure is very inferior in ſtrength to the reſt of the ruins, and is probably of a much later date; a flat arched gate in one part of it confirms this ſuppoſition. It takes in too great an area to be ſhewn in the plan, without reducing the whole to too ſmall a ſcale.

The vaſt ſtrength of the walls and perfection of their cement is a circumſtance very worthy of notice. They were evidently built by laying courſe after courſe of the coating ſtone, and running the interior parts full of fluid mortar, mixed with ſmall flints. Where the walls were not coated with ſtone, I fancy boards were uſed to confine the liquid wall, and their traces are in ſome places viſible. Almoſt every ſort of Saxon moulding now known are to be diſcovered on the ſtones diſperſed about the town, and ſome very elegant ones not very common. The ſtone is a hard coarſe grained limeſtone, and contains ſome petrifactions, but not many.

The report of a ſubterranean communication with ſome other houſe is here, as in many other places, current; and a cellar is ſaid to have a hole in it opening into the vault. From its poſition it muſt evidently have been a great drain. Perſons who have dug in the ruins have with more probability thought the Chapter houſe to be vaulted, from the extreme hollow ſound of the earth in digging. No opportunities have however offered to verify this.

VI. *Obſervations*

[To face Vol. VI. p. 66.]

References.

A	The cloiſter court now a garden	148 feet ſquare.
B	The chapter houſe	78 by 42
C	The refectory	72 by 38
D	The ſouth tranſept	of the church
E	The nef	of the church
F	The choir	of the church
G	The eaſtern chapel	of the church
H	The north tranſept	of the church
I	A paſſage vaulted two ſtories	
K	A paſſage vaulted	
L	A wall once encloſing rooms	
M	The great gate.	

a The top of the rampart thrown up in the civil wars, which croſſes the cloiſter
b The ditch of the rampart
c The ſpot where the mine was ſprung
d The leaning maſſes of wall
e A ſmall houſe built by the late lord Fane
f The remains of a ſtair-caſe
g The lavatory
h Probable ſituation of the dormitory.

[To face Vol. VI. p. 66.]

Reference.

A. The cloister court, now a garden, 55 feet square.
B. The cloister beneath
C. The refectory
D. The south transept
E. The nave
F. The choir
G. The eastern chapel
H. The north transept
I. A passage walled two deep
K. A passage vaulted
L. A wall once containing rooms
M. The great gate.

a. The top of the transept arches up to the civil wall, which crosses the choir.
b. The chimney of the transept
c. The upper monastic mine was turning
d. The leaning angle of wall
e. A Saxon Church built by the late lord Ellesmere
f. The remains of a fish-tank
g. The lavatory
h. Probable situation of the dormitory.

VI. *Obſervations upon a Paſſage in* Pliny's Natural Hiſtory, *relative to the Temple of* Diana *at* Epheſus. *By* Joſeph Windham, *Eſq.*

Read November 18, 1779.

THE ſubject of our preſent enquiry is a paſſage in the 36th book of Pliny, relating to the celebrated Temple of Diana at Epheſus: it is very conciſe, but ſo comprehenſive as to have engaged the attention of many learned commentators; who in their various explanations agree in little more than in conſidering the text, taken as it uſually ſtands, as genuine and uncorrupted; no verbal correction therefore can readily be admitted: it runs thus,

Plin. Hiſt. Nat. L. XXXVI. C. XIV.

Magnificentiæ vera admiratio extat templum Epheſiæ Dianæ ducentis viginti annis factum a totâ Aſia . . . . . Vniverſo templo longitudo eſt CCCCXXV pedum, latitudo CCXX, Columnæ centum viginti ſeptem a ſingulis regibus factæ, LX pedum altitudine, ex his XXXVI cælatæ, quarum una a Scopa . . . . . Operi præfuit Cleſiphon architectus . . . . ſumma miracula epiſtilia tantæ molis attolli potuiſſe. . . . . .

IF a comma is inſerted after the word *centum*, the paragraph will be according to the propoſed emendation, " Columnae " centum, viginti ſeptem a ſingulis regibus factae" &c. In the porticos of this temple were one hundred columns, of which twenty ſeven were the gift of ſo many kings, or princes; which conveys a meaning very different from that in which this paſſage has been generally underſtood; and upon the authority of this interpretation the truth of the annexed plan muſt depend.

THE more antient MSS. were ſeldom, if ever, pointed, that having been the work of later tranſcribers; any alteration therefore in this particular, or the inſerting a comma in a place which admits of ſo much doubt, may not poſſibly be conſidered as too great a liberty, eſpecially where ſuch addition evidently tends to elucidate the text.

ONE great and principal objection to the reading hitherto adopted, ariſes from the concluſions which have been drawn from it, and which are totally repugnant to the ſymmetry and proportion obſerved by the antients in the form of their temples, and as uniformly adhered to in thoſe of which there are any remains. In no reſpect therefore can one hundred and twenty-ſeven, or any odd number of columns, be admitted in the ſtyle called Διπτερος, of which the Temple of Diana is cited as an example. To this may be added the very improbable ſuppoſition that one hundred and twenty-ſeven Aſiatic kings ſhould each have contributed a column, whether this circumſtance is conſidered as alluding to the former temple built by Cteſiphon and Metagenes, or to the latter, erected, or more properly repaired, in the time of Alexander; the columns, and the greater part of the materials, not being of a nature to be deſtroyed by fire. Perhaps when Pliny ſays that this building was raiſed at the

joint cost of the cities and communities of Asia [*a*], he does not mean to conclude private offerings and donations, on such occasions very liberally bestowed. It is certain, that the proposal made by Alexander of furnishing the expences for this work, provided he might enjoy the honour of the dedication, was rejected by the Ephesians.

In the memoirs of the academy of Cortona, is a treatise written upon this subject by the Marchese Poleni, who from his acknowledged skill in architecture, and profound erudition as an antiquary, has been enabled to throw light upon many passages till his time held obscure. If in the present instance his ideas fail of their usual clearness and perspicuity, it is surely to be inferred that the text itself, when rendered agreeably to its common acceptation, is deficient, and that some further illustration is necessary; his interpretation certainly deviates in many respects from the rules of that art, by him in other places so well explained. These observations must be understood of the mechanical, or architectural part of his dissertation, which upon the whole is very learned and ingenious.

[*a*] See Chandler's Asia, p. 137. "Croesus was at the expence of many of "the columns."

(Ibid. p. 198.) Speaking of the temple at Jackly. "The fabric tottering "with age was gradually renewed, chiefly by the contributions of the Stephane-"phori, or high priests. For on seven columns is an inscription, which may "be thus translated—Leo Quintus, son of Leo, when Stephanephorus gave "this column, as he had promised, with the base and capital. On five more of the "columns—Inerecrates, son of Inerecrates, chief physician of the city, when "Stephanephorus gave this column, with the base and capital, Tryphaena his "daughter herself, likewise Stephanephorus and Gymnesiarch, having provid-"ed it."

In the court of the temple of the Sun at Palmyra are consoles projecting against the columns for supporting statues, probably of benefactors and contributors to the building. The same may be observed in the long portico.

IN the disposition of his plan, having supposed that the one hundred and twenty-seven columns of the text are not to be confined to those alone which constitute the Διπτερος, or outward portico, he includes others of a smaller diameter, placing them within as an ornament to the cella, apparently for the sole purpose of compleating this number; but it does not appear that Pliny means to treat of any columns except of such as composed the exterior circumference, all equally sixty feet in hight. He has also in his design very much contracted the length of this structure by allowing fifteen columns only on the sides, being one less than double the number of those in front; having followed the manner used by the Romans in later times, whose practice in this respect differed greatly from the style of that early period of Grecian architecture now under consideration.

THIS period comprehends a space of about two hundred years, from the age of Solon and Pythagoras, when the temple of Jupiter at Olympia, that of Diana at Ephesus, those of Sicily and Paestum were begun, to the time when, under the administration of Pericles, the arts of Greece arrived at their highest degree of excellence. Then was the temple of Minerva in the Acropolis erected, in exact imitation, as we may judge by the description of Pausanias, of that of Jupiter at Olympia; then probably was the temple of Diana finished, as we are informed by Pliny that it was two hundred and twenty years in building [*b*], and that one of the columns was carved by Scopas. These

[*b*] By the following Epigram in the Anthologia, it appears that the Temple of Diana surpassed all others in magnificence.

Αντιπατρου.

Και κρηναας Βαβυλων εστιδρομον αρμασι τεικος,
Και τον επ' Αλφειω Ζηνα καθυγασαμην,
Καπων τ' αιωρημα, ἠ, πολιοιο κολοσσον,
Και μεγαν αιπεινην πυραμιδων κεφαλον,

Μναμα

These temples had all of them in length more than twice the number of the columns in front. Thus in a very ancient temple at Corinth are 8 in front, 17 on the sides.

In the temple of Theseus are 6 in front, 13 on the sides.

The temple of Minerva has 8 in front, 17 on the sides.

The temples at Paestum, those in Sicily, and in the Peloponnesus, may be cited as authorities for our present purpose.

It is a conjecture not improbable, that most of these antient buildings were hypethras, or open at the top; that many of them were so is certain. Justin, speaking of the temple of Apollo at Delphi, has these words:

"Antistites et vates advenisse deum clamant, eumque se vi-
"disse desilientem in templum per culminis aperta fasti-
"gia." L. 24. c. 8.

Also Pausanias in Atticis:

Εςι δε ναος Ηρας, ουθε θυρας, ουθε οροφον εχων.

Euripides. Ion v. 177, speaking to the birds who built their nests in the temple:

—Χωρων εν δικαις
Ταις Αλφειου παιδυργει
Η ναπος Ισθμιον,
Ως αναθημαθα μη βλαπθηται.
Ναοι θ' οι Φοιβου.

Μιαμα τι Μαυσωλειο πελωριον; αλλ' ετ' εσιδοιν
Αθηναιοθ' νεφιων αχρι θεοθε δομον,
Κεινα μεν ημαυρωθο τι, κηρ δε νοσφιν Ολυμπε
Αλιοθ', ωδιν απ' τοιον τπαυγαζαθο.

The idol was of very great antiquity, of wood: it was gorgeously apparelled, the vest embroidered with emblems and symbolical devices: and, to prevent its tottering, a bar of metal, it is likely, of gold, was placed under each hand. A veil or curtain, which was drawn up from the floor to the cieling, hid it from view, except while service was performing in the temple. (See Chandler's Asia, p. 134.)

Clemens Alexandrinus de Egyptiis:

Των Αιγυπτιων ιερεων οι σοφωτατοι το της Αθηνας ναος υπαιθρον αφωριτας.

ABOUT the middle of the laſt century the temple of Minerva Parthenon at Athens was nearly entire; round the cella was a portico of two orders of columns, ſupporting a roof evidently of a later conſtruction than the reſt of the building, and probably added when it was firſt uſed by the Greek Chriſtians; this temple as well as that of Jupiter at Olympia appears to have been an Hypethros [*c*]. When Vitruvius compoſed his work, the front of this ſpecies of temple was ornamented with ten columns as its characteriſtic mark; but it was by no means eſſentially ſo, ſince the example quoted by him is an octaſtyle, by which he might mean to deſcribe the temple in the acropolis. "Hujus (Hypethros) exemplar Romae non eſt, ſed Athenis "octaſtylos, et in templo Jovis Olympiae." At Paeſtum are remains of an hypethros having only ſix columns in front; another alſo in the iſland of Ægina.

ON the medals of the antients which have temples on the reverſe, an ornament is frequently to be ſeen which conſtitutes the upper member of the cornice, and ſerves as a finiſhing to the triangular pediment round which it is continued. This moulding from its delicate form being leſs able to reſiſt the in-

[*c*] Pauſanias ſeems to deſcribe an Hypethros in ſpeaking of the temple of Minerva at Tegea.

"This temple is not equalled in ſplendor by any in the Peloponneſus. The "lower order of columns is Doric; upon theſe the Corinthian; on the outſide, "the pillars are of Ionic work. The architect was Scopas."

The two orders of columns abovementioned formed the incloſure of the Hypethros, or open ſpace in the centre of the cella. There is a great reſemblance between the temple here treated of and that at Epheſus.

juries

Temple of Diana at Ephesus.

juries of time, or violence, than any part of the entablature, is not often found amongst the remains of antiquity. Some traces of it however may be discovered. At Athens in the Choragic monument of Lysicrates, where it is still preserved very perfect. See Stuart, c. III. and the ornaments at the end of that section.

In the entrance to the portico of Octavia at Rome, this ornament [*d*] bears the impression of an eagle (b).

At Carleon in Monmouthshire was a temple decorated in this manner. Many Roman tiles, stamped with a very rude representation of a Venus (c) Marina, have been found in the river Usk near that place; one of these is now at Salisbury. Many tiles of the same kind, bearing the figures of masks or other grotesque ornaments, have likewise been discovered at Pompeii. It appears that the antients usually terminated their buildings with a moulding of this form.

It now remains that we collect into one view the most material circumstances relative to the point in question. Vitruvius, after enumerating various modes of building used in his time for religious worship, continues. "Dipteros octastylos in pronao et postico, sed circa eadem duplices habet ordines columnarum, ubi est aedes Quirini Dorica, et Ephesiae Dianae Ionica, a Ctesiphonte constituta."

Pliny has before informed us, that the columns were sixty feet in height. In the following place he determines their diameter: "In Ephesiae Dianae aede, de qua prius fuit sermo, primum columnis spirae subditae, placuitque altitudinis octava pars in crassitudine. L. xxxvi. c. 23.

Vitruvius, l. iv. c. 1. "Postea Iones Dianae constituere aedem quaerentes, fecerunt primum columnae crassitudinem

[*d*] See Degodetz, Piranesi Ant. tom. iii.

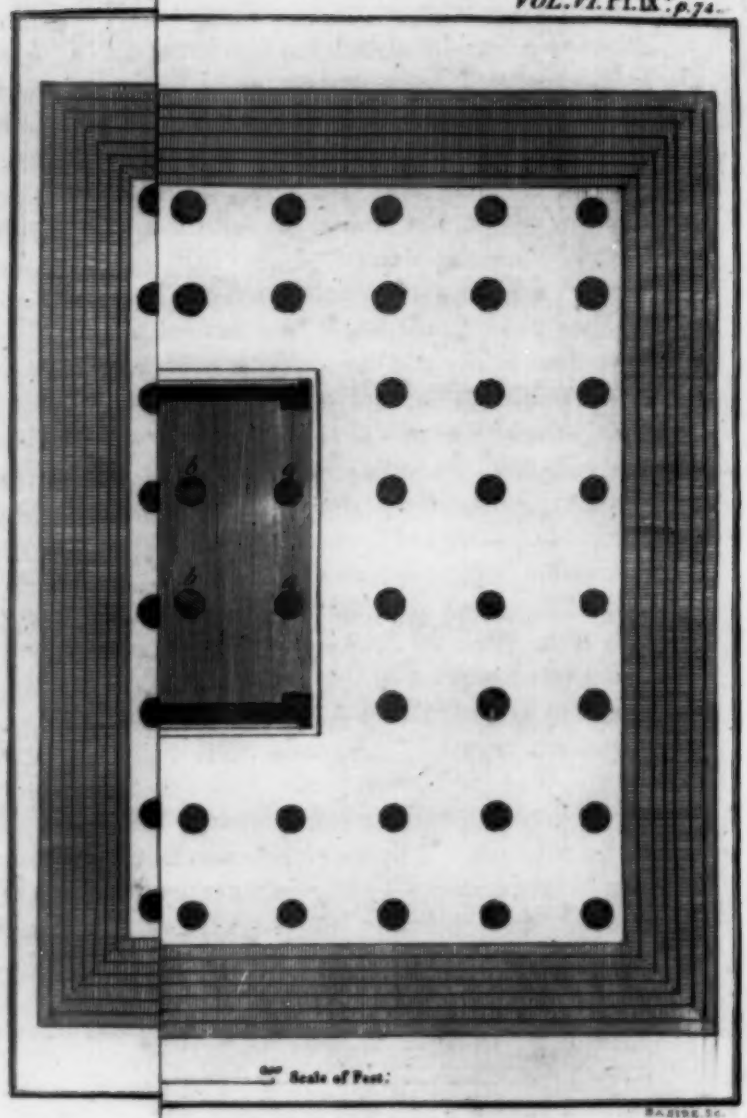
"altitudinis octava parte." This diameter, or eighth part, is in the present instance seven feet six inches.

In the 4th chapter of the 4th book, Vitruvius directs two columns to be placed between the antae of the pronaos or vestibule, as in the plan (aa): these are of the same height as those in front, and are intended to separate the pronaos from the portico in temples where the breadth exceeds twenty feet. When the breadth is more than forty feet, he adds two other columns, equal in height, but something less in diameter, opposite to the former. See the plan (bb).

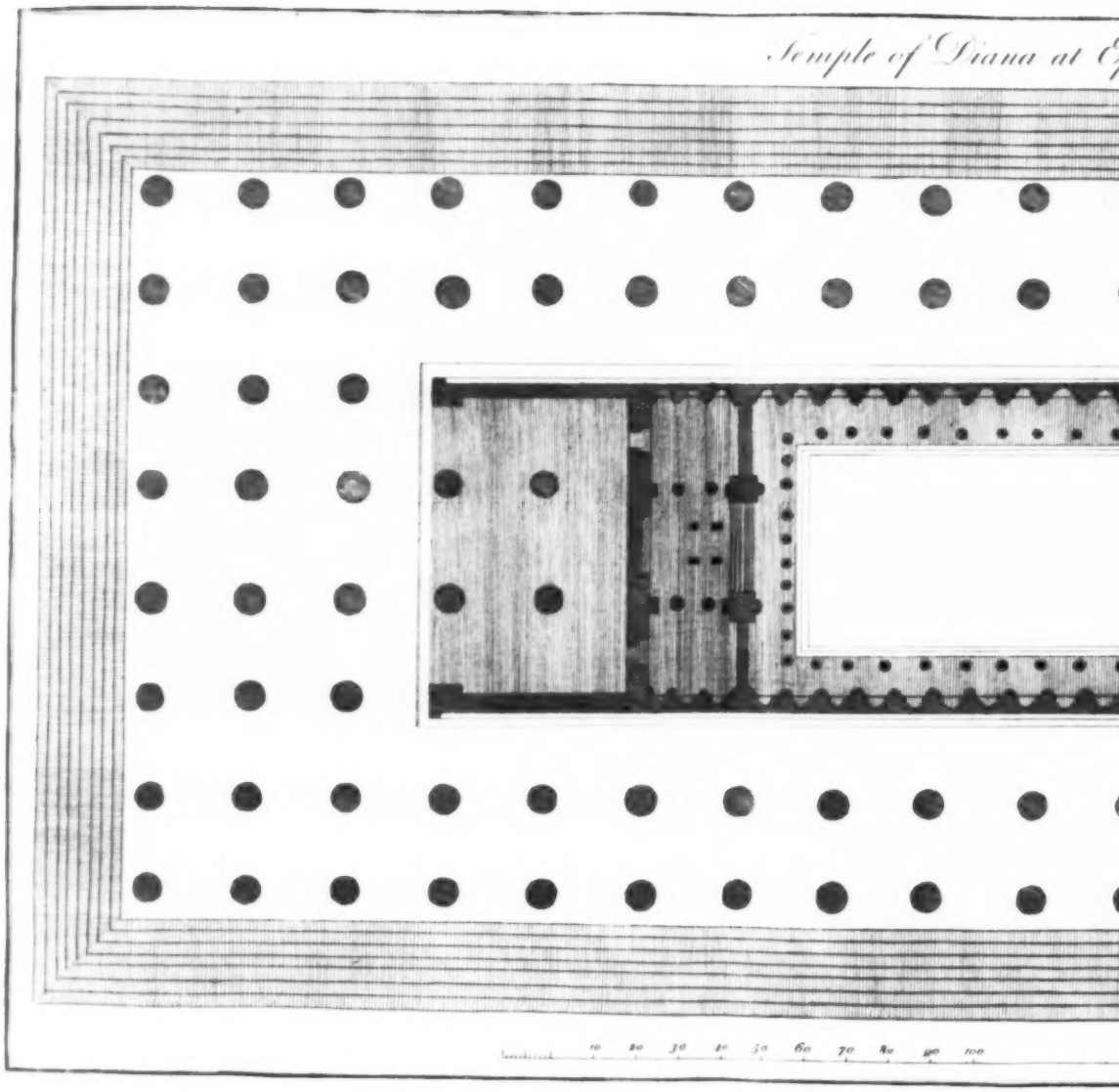
After having thus considered the form of this temple, the number and disposition of the columns, it will be proper to shew how nearly the dimensions, according to the present plan, correspond with those delivered by Pliny.

In octastyle temples, according to Vitruvius, the species of intercolumniation, called eustylo, is to be used; and he gives as an example the temple of Bacchus in Asia. This manner is here followed, leaving out the inches in each account; thus in the side intercolumniations of two diameters and 1-fourth, will be sixteen feet; the center intercolumniation of three diameters, twenty-two feet. We are likewise told by Philo Byzantius that the ascent was composed of ten steps [r]: "Primum quidem de foris "decem graduum crepidinem artifex substituit, ad basim emi-"nentem erigens;" the area of the portico forming the eleventh. The projection of this whole subasement, supposing each step to project about two feet, is twenty-one feet beyond the base of the columns. These numbers produce for the length of this temple four hundred and twenty-five feet six inches; and for its breadth; two hundred and twenty as given by Pliny; the length exceeding his account only six inches.

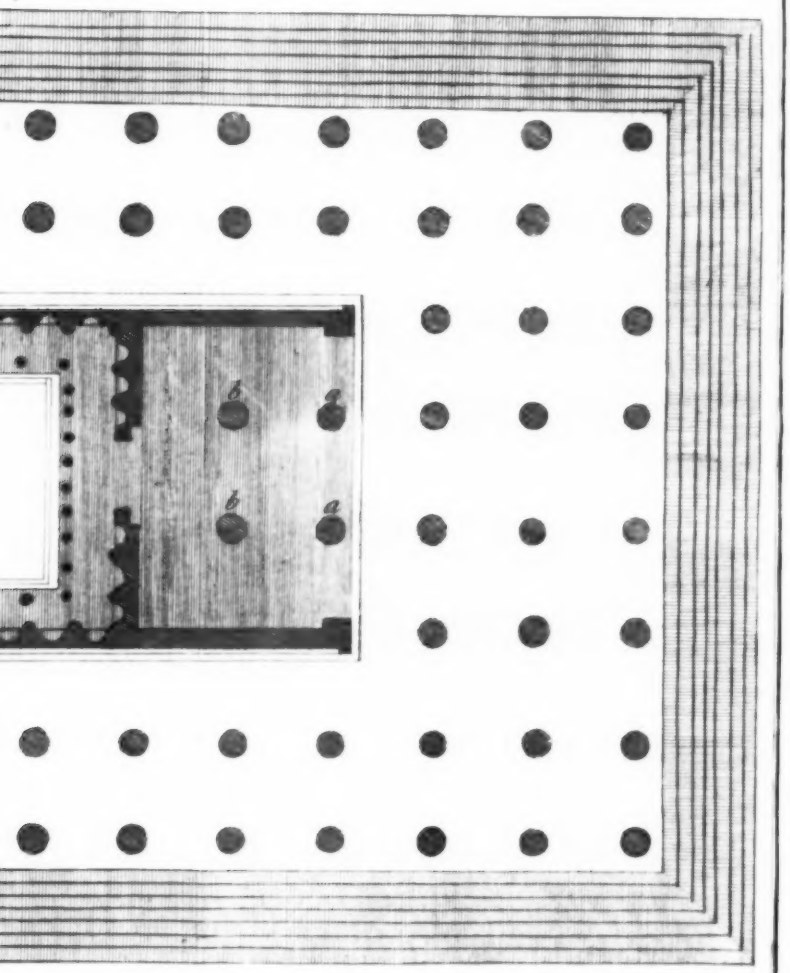
[r] V. Acad. di Cortona, t. I. p. ii. pag. 29. Chandler's Asia, p. 137.



B. Sirr Sc.


Temple of Diana at E
10 20 30 40 50 60 70 80 90 100

Ephesus.



The proportions of the architrave over the columns in the center may appear excessive; but it must be remarked, that the blocks of marble employed in this wonderful structure excited the greatest admiration. "Summa miracula epistilia tantae mo-" lis attolli potuisse [f]." Over the door is said to have been a stone of so enormous a size, that the architect despaired of being able to raise it to the height required; when the goddess herself appearing in a dream, comforted him, and in the morning it was found in its proper place.

The greater stress has been laid upon the several passages of Pliny and Vitruvius describing what existed in their time, since the very ruins of this once celebrated edifice are now so totally obliterated, that modern travellers differing from each other have not only assigned various spots upon which they suppose it to have stood, but have likewise, in direct contradiction both to the medals and the writings of antiquity, described it as of Doric construction, deceived perhaps by remains of Doric columns, which they have imagined to belong to this building.

Much additional information might be collected on this subject, chiefly historical; for which Chandler, Spon, and other writers, may be consulted; the observations necessary to the illustrating the given quotation from Pliny being submitted to the opinion of the Society; and these perhaps have already been too far extended.

[f] Pliny, loc. cit.

VII. *Remarks on the antient Pronunciation of the* French *Language, by the Rev. Mr.* Bowle, F. A. S. *In a Letter to the Rev. Mr.* Norris, *Secretary.*

Read November 25, 1779.

REVEREND SIR,

AMONG the ſeveral writers who have exerciſed their talents on that inexhauſtible fund of criticiſm the works of Shakeſpeare, Dr. Farmer in his Eſſay on his learning confeſſedly ſtands foremoſt. My preſent buſineſs to you, Sir, and the Society, is to point out a miſtake of his, and ſome other commentators, on the following French paſſage in Henry V. act 4. "Eſt-il impoſſible d'eſchapper la force de ton *Braſ?*" Piſtol. "*Braſs*, cur, thou damned and luxurious mountain goat, offer'ſt me *Braſs?*" Whether this came from the pen of Shakeſpeare or no, as it is not in the quarto of 1608 in my poſſeſſion, is foreign to the preſent purpoſe, but ſeems to evince that it was then ſo pronounced, as it would now be by an Engliſhman totally unacquainted with the French mode of pronunciation. The aſſonance was undoubtedly in this inſtance as in what follows: French ſoldier. "O pardonnez moy." Piſtol. "Sayſt thou me ſo; is that a ton of moys?" Mr. Johnſon makes a doubt, ſays Dr. Farmer [*a*], whether the pronunciation of the French language may not be

[*a*] Eſſay on the learning of Shakeſpeare, p. 87.

changed

changed ſince Shakeſpeare's time: *but this does not appear to be the caſe, at leaſt in this termination.* The following authorities, which very probably eſcaped the ſearches of this diligent enquirer, will I think amount to proof poſitive, that the pronunciation of the French language has materially varied, and that it was originally pronounced as we do thoſe French words, which are become a part of our own language. *Theodore Beza* in his *De Francicæ Linguæ recta pronunciatione Tractatus. Genevæ*, 1584, 8vo. p. 34. ſpeaking of the letter *ſ*, ſays, "Haec "conſonans *ſuo nativo ſibilo* ſemper profertur dictionem incipiens. "Intra ipſam autem dictionem, ſi inter duas vocales deprehenda- "tur, tunc leniſſimo *ſibilo* ut Zain Hebræorum et Francorum Zeta "pronunciatur, ut *cauſe*, *raiſon*, *oſer*, &c. quae ſic efferuntur ac "ſi ſcriberentur *cauze*, *raizon*, *ozer*: idque uſque adeo perpetuum "eſt, ut etiam haec litera dictionem finiens, et inter duas vocales "deprehenſa ſimiliter pronuncietur." From whence it may be ſafely inferred that the *ſ* was not totally dropt, but was more or leſs retained *nativo ſuo ſibilo* even at the end of words where no vowels followed; as *pas a pas*, *de pis en pis*, *vis a vis*, where according to *Richelet* in modern pronunciation *on la ſait entendre.* And this genuine pure mode of expreſſion unadulterated by modern refinement is ſtill in uſe amongſt us, as a *crouſt* of bread, *ouſt* a man out of his poſſeſſion, *honeſt*, and the like. As to this laſt word, Paſquier, who died at 87 in 1615, ſays the *ſ* was in his youth pronounced, but afterwards turned into a very long E. The *O yes* of a modern cryer in a louder tone, but with the ſame modification of voice with which we ſometimes expreſs a familiar aſſent, may very probably have been the old manner of expreſſion. To *calenge* is to this day in uſe among the commonalty in the weſt of England: and who can demonſtrate it to be wrong? I find the word ſo uſed in the old

Erench

French Romance of *Huon de Bourdeaux*, Ed. Lyons, 1612, 8vo. p. 618. "Je te *calenge* la terre la quelle sera mienne." It is also to be found in *Halle's Chronicle*, Edward V. f. 1. "Their father began not by war, but by law to *calenge* the croune of England." But to return to what gave rise to this enquiry, I have only to add, that, without this pronunciation which I have endeavoured to establish, Pistol's reply is totally devoid of sense or meaning.

J. BOWLE.

P. S. As it is necessary to produce proper vouchers for what is above asserted, they are here added; with this farther view to shew that the several letters were originally pronounced distinctly. 'Voyant le monde par un jugement delicat *mots proferez* 'avec toutes leurs lettres estre un peu trop rudes au son des au-'reilles, on reforma au long aller cette grossiere façon de parler 'en une plus douce, et au lieu d'*eschole*, *establir*, &c. *avec* '*prononciation de chaque lettre*, et element, l'on s'accoustuma de 'dire, *école*, *établir*, &c. vray que tousjours est demeuré l'ancien 'son en ces mots *espece*, et *esperer*, mais peut estre que quel-'que jour viendronts-ils au rang des autres, aussi bien que *de* '*nostre temps* ce mot *d'honneste* (auquel en ma jeunesse j'ay veu 'prononcer la lettre de S,) s'est maintenant tourné en un E, 'fort long.' Pasquier, *Recherches de la France*, l. viii. ch. L. 676. ed. Paris, 1633. fol.

VIII. *Obser-*

VIII. *Obſervations on the Plague in* England, *by the Rev. Mr.* Pegge. *In a Letter to Mr.* Gough.

Read January 13, 1780.

Dear Sir,

THOUGH I eſteem it to be criminal in ſome degree to be dropping falſe hints and ſuggeſtions about any matters that may materially affect the public, or raiſing groundleſs fears and apprehenſions concerning the plague, or war, or any other the like alarming ſubjects; yet I doubt I ſhall be but too well juſtified in declaring, that at this juncture we appear to be in imminent danger of having the peſtilence imported into this iſland. It now rages violently at *Conſtantinople*, in the *Levant*, and in *Africa*; inſomuch that all the neighbouring nations, as we learn from the public prints, are taking all neceſſary precautions againſt it; and adminiſtration here at home have thought proper to double the quarantine.

The great port of *London*, and the out-ports, have doubtleſs the moſt reaſon to be upon their guard on theſe terrifying occaſions; but give me leave, Sir, nevertheleſs, to obſerve to you, that even we, who live at ſo great a diſtance from the metropolis,

polis, or any other ſea-port, are not totally exempt from danger, whenever the plague happens to invade this kingdom, as will appear from the relation which I am now going to give you of what formerly paſſed, in reference to the plague, in this inland county of *Derby*.

At Cheſterfield the plague began 2 October, 1586, as is expreſly remarked in the pariſh regiſter, where in the margin it is called the great plague to diſtinguiſh it from a leſs fatal infection that broke out A. 1608-9. In November there were fifteen burials; after which it ſeems to have ceaſed for the winter, but appeared again in May 1587, where there were fifteen burials, and in June fifty-four. It continued to rage till November, for as in the month of December there are only five deaths, which is ſcarce more than common in this large pariſh, it may be ſaid to have ſtopt in November. The latter or leſſer plague at Cheſterfield began 18 March 1608-9; ſo it is noted in the margin of the regiſter again. This ſeems to have laſted only April and May, and not to have been very fatal.

The plague, Sir, raged at *Brimington*, a hamlet in the pariſh of *Cheſterfield*, at the beginning of the laſt century. But the beſt account of it that can now be procured, is deficient in one material reſpect, ſince it never could be known with certainty, not even after the ſtricteſt enquiries, in what manner the diſtemper was brought thither. But though the mode of conveyance be not preciſely known, yet, in all probability, it came from *London*, where, according to Mr. *Stowe*, it raged furiouſly the ſame year [*a*], and from whence many people then fled into the country [*b*]. However, *the ſickneſs*, as it was commonly then called, appeared at *Brimington* at the end of October 1603, between which time and January 2 following there died, at

[*a*] Stowe, p. 857. Dr. R. Brooke's Hiſt. of Peſtil. Diſtempers, p. 33.
[*b*] Stowe, ibid.

this

this ſmall place, and were there buried, five men and four women, as appears from the pariſh-regiſter of *Cheſterfield.* The diſtemper never ſpread thence to *Cheſterfield*, nor into any other neighbouring places, ſo far as can now be diſcovered: indeed, as to the adjoining pariſh of *Whittington*, whence I write this, proper precaution was taken to prevent its getting thither; the bridge, called *Gooſe-Acre-Bridge* (ſo named from a field at the foot of it,) and then the principal communication with *Whittington*, being pulled down at this time [*c*], that ſo all intercourſe might be broken of with the infected at *Brimington.*

THE meaſures purſued by the inhabitants of Brimington among themſelves are only known by tradition, which informs that ſome cabins were erected in a field there now called from thence *Cabin-field.*

THE plague appeared at *Belpar*, in the pariſh of *Duffield*, A. 1609. I don't find the infection at London in that year, but Stowe obſerves, that A. 1604 it pleaſed the Almighty to viſit the *whole land* with peſtilence, London only excepted; whence it ſhould ſeem to have continued diſperſing itſelf, for ſome years, in country places, or rather the ſeeds of the diſorder lay hidden in cloaths, or other receptacles favourable to them [*d*]; however, the malady broke out at *Belpar* A. 1609, and fifty-

[*c*] This bridge, of which ſome remains are now to be ſeen in the river Rother at low water, was never after re-edified; for though one Martin Woſtenholme, of Eckington, wanted to have it rebuilt, and for that purpoſe indicted it, the people of Brimington ſtood trial with him, and caſt him at the quarter-ſeſſions, about A. D. 1692. A lane goes down from Brimington northward to the place where the bridge ſtood, and another from Whittington ſouthward, and theſe lanes plainly point out the *quondam* ſite of the bridge. This was then a great road for packhorſes from the vicinal parts of Derbyſhire and Yorkſhire, which, after they had croſſed the water, proceeded through Brimington, and over the moor there, for London. The only road from Whittington to Brimington now is by the New Bridge, ſo called in reſpect of that *old* one pulled down as above.

[*d*] See Dr. Mead's works, p. 290.

one persons died of it there, between May 1 and September 30, as the register of Duffield shews. This again appears to have been a confined and very local disaster, since one does not hear of its spreading into any other places in that neighbourhood.

THE plague again just made its appearance (for it did not spread even in the place) at Holmesfield in the parish of Dronfield, about the same time, as we learn from this single entry in the register of Dronfield, "William Townesend, curate of "Holmesfeild, who died of the plague, was buried in Holmes-"feild chappell yeard 12 Mar. 1609."

IN the close of the year 1664 began that ever memorable plague at London, which, in a little above a year, killed, as Dr. Hodges [*e*], Dr. C. Brookes and Mons. Rapin tell us, 100,000 persons [*f*], and was carried to *Eyam* in the *Peak of Derbyshire* by means of a box sent from London to a Taylor in that village, containing some materials relating to his trade [*g*]. Dr. Mead's narrative concerning its ravages there is as follows:

'A SERVANT, who first opened the foresaid box, complaining that the goods were damp, was ordered to dry them at the fire; but in doing it was seized with the plague, and died: the same misfortune extended to all the rest of the family, except the taylor's wife, who alone survived. From hence the distemper spread about, and destroyed in that village, and the rest of the parish, though a small one, between two and three hundred persons. But notwithstanding this so great violence of the disease, it was restrained from reaching beyond that parish by the care of the rector; from whose

[*e*] Loimologia, p. 28.

[*f*] Others say, 68,596. Dr. Hodges in the Table; Annot. on Rapin II. p. 641. Maitland I. p. 430. Here they speak of the Bills of mortality merely.

[*g*] Dr. Mead, p. 290.

'son,

'ſon, and another worthy gentleman, I have the relation. 'This clergyman adviſed, that the ſick ſhould be removed into 'huts and barracks built upon the common; and procuring the 'intereſt of the then earl of Devonſhire, that the people ſhould 'be well furniſhed with proviſions, he took effectual care, that 'no one ſhould go out of the pariſh; and by this means he 'protected his neighbours from infection with compleat ſuc-'ceſs [*b*].'

The rector here commended, both for his care and tenderneſs towards his pariſhioners, and his prudence in conducting this dangerous buſineſs ſo happily, was the Rev. Mr. William Mompeſſon; and his wife [*i*], who was before conſumptive and inſiſted upon ſtaying with him, when he ſent his children away from the place, died of the diſtemper. Mr. Mompeſſon, in a letter I have ſeen, ſays, ſeventy-ſix families were viſited with the calamity, and two hundred fifty-nine perſons died. His man-ſervant had the diſtemper, and upon the appearance of the tumour he gave him ſeveral chymical antidotes [*k*], which had a very kind operation, and with the bleſſing of God kept the venom from his heart, as he expreſſes it [*l*], and after the tumour broke he was well; his maid, a circumſtance very fortunate for him, continued in health all the time. The defunct were interred on the common abovementioned, where the grave-ſtones of ſeveral are ſtill remaining. I would add, that Mr. Robert Standley, who had been miniſter and regiſter here, but diſplaced A. 1662, continued at Eyam all the time of the peſtilence, 'And, as my author writes, though not then a mi-

[*b*] Dr. Mead, p. 291.

[*i*] Catharine, daughter of Ralph Carr of Cocken in biſhoprick of Durham, Eſq. She died Aug. 25, 1666.

[*k*] See the Directions for the Plague by Coll. of Phyſicians 1665. in Ded. and p. 33.

[*l*] See Dr. Hodges, p. 74.

'nister of that place, yet he shewed himself both a minister, 'and did many good offices to that place, during that sore and 'very mortal visitation [*l*].'

'Tis observable, that the poor patients, Mr. Mompesson's prisoners, as one may term them, at Eyam, principally depended on the liberality, countenance and interest of William, the third earl of Devonshire (who came to the title A. 1628 and died A. 1684) for their maintenance and support, during this horrible calamity. But this, I imagine, might be partly in consequence of the orders, or directions, issued by his majesty and the privy-council, impowering the justices to levy money for the service of infected places, as was usual on such occasions. I say *as usual*; for though the regulations given out at this time, when the malady was so grievous and extensive, have not at present occurred to me, yet one has reason to infer the existence of them, from former precedents and practices [*m*]. I find in certain memorandums taken by me from Sir Edward Dering's library at Surenden, that when the town of Ashford, and Kennington, a village in that neighbourhood, were visited with the plague A. 1625 [*n*], the justices, 4 July, directed the lower half-hundred of Calehill to contribute 1 *l.* 19 *s.* 6 *d.* towards their assistance, the inhabitants of Ashford and Kennington not being able to defray the necessary expences; and this was *in persuance of the statute and orders* from his majesty and lords of the council. The plague increased at Ashford, and in a second letter, 1 August, 1625, the justices set forth, that the inhabitants are not able 'to relieve and orderly to attend the sick, and to beare 'abowt the charges of theyr other poore artificers, who for

[*l*] Porter's Life of Mr. John Hieron, p. 51.

[*m*] Strype on Stowe's Survey of London, II. p. 544. 565.

[*n*] This was a very destructive plague, Stowe, p. 1041. Maitland, I. p. 299. 430. Rapin, II. p. 244.

'want

'want of trade must of necessity be provided for, or els they 'will be forced for the succor of theyr lives to *break forthe of* '*that towne*, to the great danger of the country; and for that '*by the law, and by vertue of a late order commenaed from his* '*majesty's privy-council* to be executed during this tyme of in-'fection, we are to take order for theyr reliefe, taxing and as-'sessing the inhabitants within five miles of the places infect-'ed, or to extend the said taxing to other parts, or in any 'other limitts, as to us shall be thowght requisite,' and therefore they order the said half-hundred to collect 3 *l.* intended for a month's provision for the poor people of the town of Ashford.

THUS it should seem, that if the earl of Devonshire and the rector of Eyam had no express directions given them by authority at this time, they followed those which had been issued on the like occasions in former years, particularly those of A. D. 1625, which regulated the proceedings of the Kentish magistrates. However this may be, the measures pursued at Eyam were certainly the wisest that could be devised, as is clearly demonstrated by the event, since the distemper never extended itself beyond the bounds of the parish.

I am, Sir,

Your most obedient Servant,

Whittington, Oct. 28, 1778.

SAMUEL PEGGE.

P. S. As it was common for people, especially the opulent, to leave the city, and fly into the country, in times of such general mortality, as has been noted above [*o*], so it is said a lady of fortune, whose name cannot now be recovered, came to Chesterfield A. 1603 or 1625, along with Paul Fletcher, Lon-

[*o*] See also Dr. Hodges, p. 12. 15. 25.

dom

don carrier, bringing all her money, jewels, and other valuables with her; that ſhe died there, and Fletcher ſucceeded to all her wealth. 'Tis certain, that this Walton about that time, bought the whole eſtate at Walton of Sir Arthur Ingram, and afterwards ſold off a good part of it. He was buried at Cheſterfield, 4 March, 1663-4, under the deſcription of Paul Fletcher of Walton, and left his eſtate to Paul Jenkinſon, who, I think, was his great nephew, was afterwards created a baronet 1685, and became patriarch of the now-extinct family of Jenkinſon of Walton.

*** The regiſter of *Enfield* pariſh, which, including the Chace, then leſs populous than at preſent, is twenty miles round, ſays that in the plague of 1603 here died one hundred and eighty perſons, of whom ſeventy-one were women. In that of 1625 ſixty-ſeven, including twenty-ſix women; in 1665 fifty-five; ſo that the firſt of theſe three was far more fatal than the laſt, though diſtinguiſhed in our Chronicles by the name of the *great plague*. Notwithſtanding it is much eaſier to account for the number of perſons dying of it at the diſtance of only ten miles from the capital, the diſproportion of deaths in the ſeveral plagues in the ſame pariſh, can only be accounted for by ſuppoſing that of 1603 to be the attack of a new diſorder which the faculty had not experience to oppoſe. But againſt that conjecture the ſame regiſters hold out an objection; for the plague carried off here in 1593 fifty-ſeven, in 1594 two, in 1609 thirteen, in 1631 five; but the number of burials in a day imply that it continued ſome months this year; in 1636 three, in 1637 ten, in 1642 one, in 1645 five, in 1647 ſeven, and of theſe the very firſt year the plague was felt here was leſs fatal by two thirds than 1603. R. G.

3

IX. *A further*

IX. *A further Description of antient Fortifications in the North of* Scotland, *by Mr.* James Anderson, *in a Letter to the late* John Lind, *of* Lincoln's Inn, *Esq.*

Read January 13 and 20, 1780.

REVEREND SIR,

I HAD some time ago the honor of communicating to our Society some remarks of Mr. Anderson on antiquities remaining in the north of Scotland. The Society has judged them worthy of a place in their late publication [a]. I persuade myself therefore I shall be rendering an acceptable service to the Society in communicating to them some farther remarks of the same very ingenious gentleman on the same subject, and which I have now the honor of inclosing to you.

I am, with the highest regard,
Reverend Sir,
Your most humble
and obedient servant,

Lincoln's Inn, Dec. 9, 1779.

JOHN LIND.

To the Reverend Mr. Norris,
Secretary to the Antiquarian Society.

[a] Vol. V. p. 241—266.

DEAR

DEAR SIR,

AS the account I ſent you ſome time ago of ſome remain of antiquities in the North of Scotland gave you ſatisfaction, I now ſend you a few additional remarks on the ſame ſubject, particularly with regard to the vitrified walls, the exiſtence of which I have been told is ſtill doubled by ſome ſceptical philoſophers in the metropolis.

I HAVE now examined ſeveral other hills fortified after the ſame manner as that at Knockferrel, but I find they differ from each other in ſome particulars. At Knockferrel the vitrified cruſt ſurrounded the wall only on the outſide whereas at Tap-o-noath in Aberdeenſhire where a large fortification of this kind has been, the vitrified cruſt is only diſcoverable on the innerſide of the wall without any marks of vitrification on the outſide, except at one place, where the whole of the conical wall is incruſted on both ſides. I apprehend indeed that the whole of the wall on this hill has been originally incruſted on both ſides, but as it is very ſteep and has probably been built very near the edge of the precipice, the foundation has gradually given way ſo as to allow the vitrified cruſt on the outſide to ſlip down the hill, at the foot of which large maſſes of it are ſtill to be found in abundance, and being thus demoliſhed nothing now remains on that part of the wall but the looſe ſtones that formed originally the heart of the wall tumbled alſo in part down the hill, whereas the veſtiges of the inner cruſt whoſe foundations remain firm are ſtill diſtinctly perceptible. The hill on that part where the wall remains entire is leſs ſteep than the other part of it; the green ſod remaining entire to the very foot of the wall, which ſeems to confirm this conjecture.

ON the top of the hill called *Dun-o-deer* in Aberdeenſhire, there are alſo veſtiges of a fortification of the ſame kind, but as I here

I here obſerved ſome particulars that I did not diſcover in any of the other hills of the ſame clifts that I examined, I took a drawing of the ground plan of it, with two perſpective views which I incloſe for your inſpection [*b*].

THIS is a beautiful green hill ſituated in the middle of the extenſive vale called the *Gariocts*. This hill was celebrated by Boethius, as containing inexhauſtible mines of gold in its bowels, from which there iſſued ſuch a ſubtile effluvium, or exudation, or what you pleaſe to call it, as tinged the teeth of the ſheep which paſtured upon it in his days with a beautiful golden hue. But he lived in that age where alchemy flouriſhed, ſo that it was no difficult matter for them to convert iron into gold.

ON the top of this hill, beſides the vitrified wall already alluded to, there are alſo the remains of another antient ſtructure of ſtone and lime, which is by the vulgar ſuppoſed to have been the palace of one of the kings of Scotland. It diſcovers no remains of princely magnificence, and has been evidently a ſtrong hold erected at that period when every princely baron was obliged to have ſuch habitations for ſecuring himſelf and his vaſſals from the ſudden attacks of his barbarous neighbours. This caſtle has been originally a ſquare, ſixty feet on each ſide the walls about twelve feet in thickneſs, with ſmall windows, in the common ſtyle of building in thoſe days. It is now in rubbiſh except a ſmall part of the weſt wall which was lately repaired, ſo as to keep it from falling, at the expence of the neighbouring gentlemen who wiſhed to preſerve it on account of its picturesque appearance which is ſeen from afar. The ſite of this building is marked on the plan at H.; the part that is ſtanding is ſhaded black.

THERE is no tradition of the time when either this ſtructure or the vitrified walls were erected; but it is ſufficiently apparent

[*b*] See plates IX. X.

 that

that the latter muſt have been of a date much prior to the former, and built by a nation in a very different ſtate of civil polity; for at that latter period the lord of the domain having found, we may ſuppoſe, the old vitrified fortification inadequate to the purpoſe of defence, or inapplicable to the ſtate of his private affairs, has purpoſely demoliſhed them, and with their ruins erected his own habitation. This is evident from the fragments of the vitrified walls and ſcorched ſtones, which are every where diſcoverable in the ruins of the ſtone and lime building.

THIS circumſtance deſerves in my opinion to be particularly attended to, as it ſerves to throw ſome light upon the antient ſtate of our civil polity, and its revolutions, where more diſtinct records are wanting. In the infancy of ſociety, perhaps, in all nations no man aſſumed any other authority over others than what was voluntarily yielded on account of his age, experience, or ſuperior abilities, whether mental or corporeal. But man could hardly be placed in ſociety before he would diſcover that without the aſſiſtance of his fellows he was a weak defenceleſs animal; ſo that, although each might live independent of another while at peace, when any danger threatened they would find the neceſſity of uniting together for mutual defence, and of ſubmitting for the time to be directed by the wiſdom of ſome man in whom they in general placed confidence. In this ſtate of ſociety it would exceed the power of any individual to render his own place of reſidence ſufficiently ſtrong to reſiſt the attacks of any invading power, and therefore it would become the intereſt of the whole community to fortify, in the beſt faſhion they could, ſome places of ſtrength to which the whole community could retire for ſafety in times of danger. So long as they continued to migrate from one region to another in *hordes* this place of ſtrength would be only a temporary fortification, of the nature of a camp; and this ſeems to have been the

ſtage

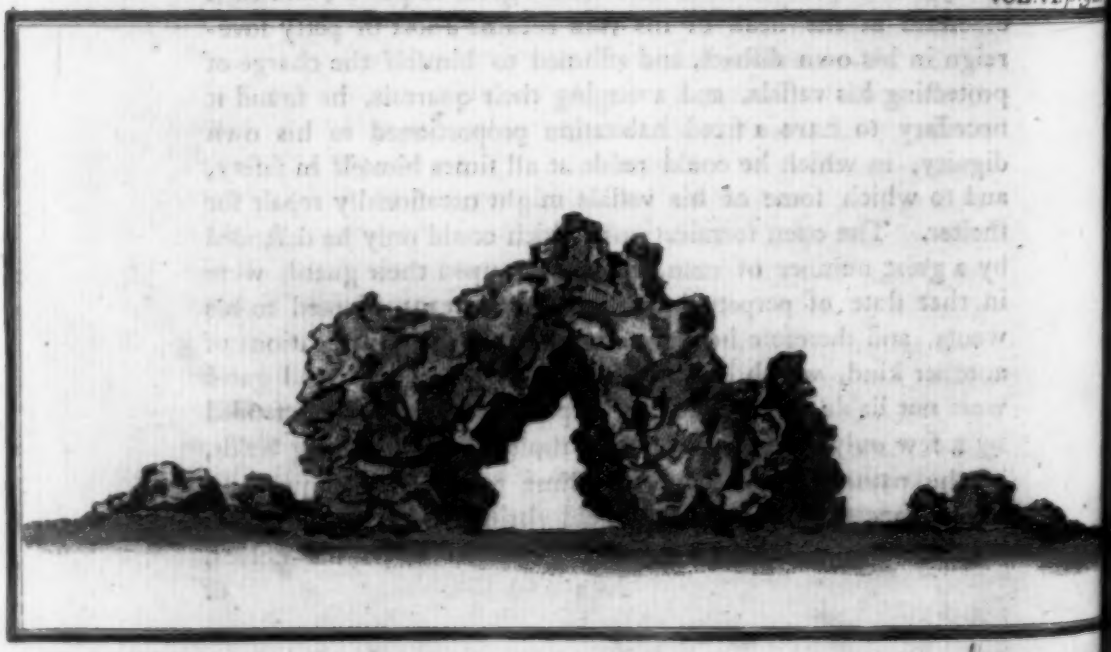
ſtage to which the Germans had arrived in the time of Tacitus. But in a more barren country, where grain could only be raiſed with eaſe on thoſe ſpots which had been already cultivated, and in a ſtate of ſociety ſomewhat more advanced in civilization, when ſome idea of private property began to take place, the man who at a great deal of trouble had cleared a ſmall ſpot for himſelf, and erected an habitation that could ſtand for more than one ſeaſon, would look out for a place of ſtrength not far from himſelf, to which he could retire occaſionally in caſe of danger, which he would fortify in a durable and ſubſtantial manner. In this ſtage of ſociety have in all probability theſe vitrified fortifications been reared, which ſerved not as a place of continued reſidence to any one, but merely as a place of temporary retreat when any national danger threatened which individuals were not able to repel.

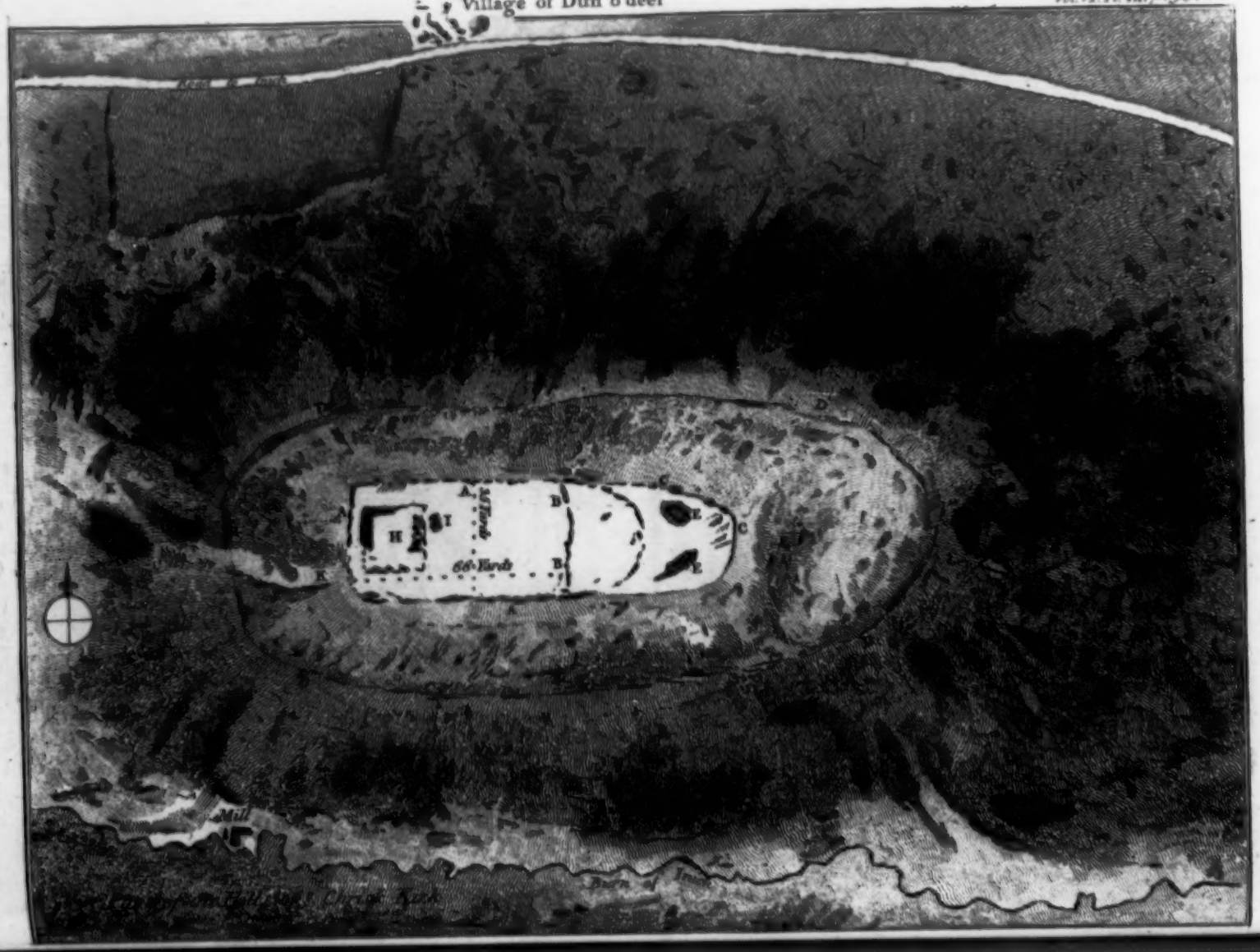
BUT when, at an after-period, honours and fiefs became hereditary, when particular families waxed great in power, and each chieftain at the head of his clan became a ſort of petty ſovereign in his own diſtrict, and aſſumed to himſelf the charge of protecting his vaſſals, and avenging their quarrels, he found it neceſſary to have a fixed habitation proportioned to his own dignity, in which he could reſide at all times himſelf in ſafety, and to which ſome of his vaſſals might occaſionally repair for ſhelter. The open fortifications, which could only be defended by a great number of men, perpetually upon their guard, were in that ſtate of perpetual alarm by no means adapted to his wants, and therefore he had recourſe to ſmaller fortifications of another kind, which by the ſtrength of their walls and gates were not liable to be ſuddenly ſurprized, even when defended by a few only. This gave riſe to thoſe numerous ſtrong holds, of the nature of the ſtone and lime tower now in queſtion, which ſuperſeded the uſe of the old vitrified open forts, which were either neglected and ſuffered to fall to ruin of themſelves,

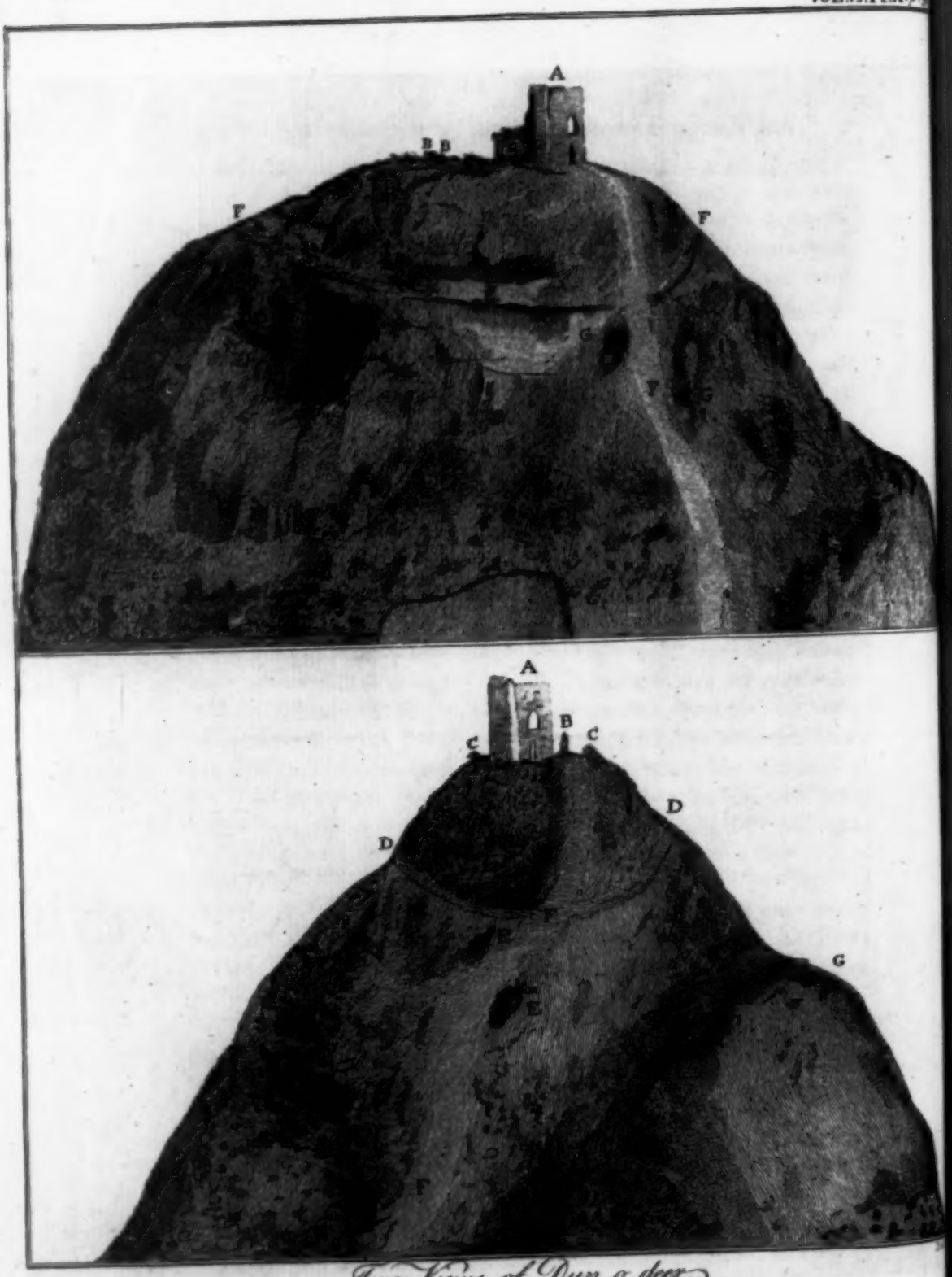
or were pulled to pieces like that of Dun-o-deer, to afford materials for a dwelling better ſuited to the wants of the owner.

FROM this cauſe the ruins of the vitrified walls on the top of this hill aſſume a very different appearance from the others already mentioned: where the vitrified matter has been ſo ill compacted, as to admit of being broken into ſmall pieces, they have been carried away, and the walls razed to the very foundation; but, where theſe vitrified maſſes were too firmly united to admit of being eaſily broken into ſmall pieces, they have been ſuffered to remain in their place, where they ſtill exhibit to the eye of the curious traveller venerable remains of antient *art* now miſtaken by the careleſs for the operations of nature, ſome of which aſſume a beautiful and picturesque appearance, as may be perceived by the faint repreſentation of them annexed, which has been perforated by a hole like a natural rock.

VOL. VI. p. 92




A
B
C
D
E
F
G
H
I
K
L
M
N
O
P
Mill
Mill Yards
66 Yards
Burn of Ina



Two Views of Dun o deer.

Theſe ruins are indeed the firmeſt maſſes of the kind that I have met with. Here, however, as was to be expected, we in vain look for the large backing of looſe ſtones to be found in all the other buildings of this kind that I have ſeen: they have been carried away to the ſtone and lime tower, and nothing remains but maſſes of the vitrified rock, if I may venture that expreſſion, ſtripped entirely naked, riſing up in irregular maſſes round the hill: yet even here ſome ſtones are found with one end immerſed firmly in the vitrified matter, while the other end projects conſiderably beyond it, and is only browned by the heat. This circumſtance ſufficiently marks that theſe walls muſt have been built after the ſame general plan with the others of this claſs.

THE entry to both theſe caſtles has been from the weſt near the ſtone and lime tower, where the hill is of more equal aſcent than at any other place, although the deſcent towards the eaſt is, near the ſummit, much more gentle than towards the weſt, which has occaſioned ſome additional works there, the traces of which are ſtill ſufficiently diſtinct, and are delineated on the plan for your inſpection (ſee pl. IX.), where AAAA is the vitrified wall ſurrounding the whole hill. BB is the remains of another wall that has been drawn right acroſs the hill, at that part where the deſcent to the eaſtward begins to be perceptible. No marks of vitrification are diſcoverable in this wall. CCC is the remains of a ditch, with a rampart ſtretching out beyond the vitrified wall ſtill farther to the caſtward. Beyond that, and conſiderably down the declivity of the hill, is the remains of another ditch of circumvallation DDDD ſeen in the perſpective views of the hill at DD pl. X. fig. 2. and FFF in the ſame plate fig. 1. Below this, in ſome parts of the hill, there are ſome indiſtinct marks of another ditch; but this is now in a great meaſure obliterated, except in that part of the hill marked G. fig. 3.

BESIDES

BESIDES these lines of circumvallation, which have been evidently intended for defence, there are several excavations in the hill plainly artificial, the intention of which is not quite so obvious; although I think it probable that they also were meant for defence. Two of these are found between the circular rampart to the east, and the vitrified wall at EE, pl. IX. These hollows may be about five or six feet deep, with an easy and smooth descent to the bottom from all sides. The hill is at this place only of a gentle declivity, which would render the works more difficult to be defended than where it was more steep; which gives room to conjecture, that these cavities might either be intended to screen the defendants on ordinary occasions from the missile weapons of the enemy, by way of guard house, or to conceal a body of men by way of ambuscade. Upon examining the face of the hill along the east side where the great ditch of circumvallation runs along a more level surface than at any other part of the hill, and where it is of course much more liable to be forced, four more excavations of the same kind were discovered, which are marked FFFF, fig. 1, nor could I perceive any more of the same kind in any other part of the hill, save two on the west side near the entry marked GG, fig. 1. I leave you, Sir, and others to conjecture what may have been the intention of these hollows. For although I do not forget that fame has placed gold in the bowels of this mountain, which might have induced some persons to dig in search of these imaginary treasures, yet there seems to be little reason to suppose that these cavities have been formed by that means, as they are greatly too wide for their depth, and as the rubbish that has been taken out of them has been carried clear away, which it is natural to think would have been tumbled carelessly down the hill from the mouth of the hole, had they been opened only in search of treasure.

IT

IT has been ſaid that theſe vitrified walls are no where to be found but where the rock on which they ſtand is of the *plumb-pudding* kind; but this I can aſſure you is a miſtake. The hill of Tap-o-noath conſiſts chiefly of ſmall fragments of rotten granite, that of Dun-o-deer is a maſs of ſlaty iron gravel.

You will probably recollect that in my laſt I hazarded a conjecture, that the circular towers called *Duns* were of Norwegian extract. Since that time I have made enquiry if they were common in the Orcades, which muſt be the caſe if my conjecture be right. By a letter from Arthur Nicolſon, Eſq. jun. of Lerwick, I learn that buildings of that kind are extremely numerous through all theſe iſlands. Some of theſe he ſays are ſurrounded with a kind of moat or ditch, from which circumſtance, and in compliance with the prevailing opinion, he conjectures that they have been places of ſtrength, or alarm-poſts for warning the country of danger. My reaſons for rejecting both theſe opinions, with regard to thoſe at leaſt in the north of Scotland, are given in my former letter, to which I here refer. But that you may the better judge of the nature of theſe ſtructures, I ſhall tranſcribe a part of Mr. Nicolſon's letter, giving a deſcription of the moſt entire ſtructure of that kind which is found in that country.

"I SHALL give you an account of the principal one, which I conjectured to have been the reſidence or ſtrong hold of their prince for the time. It is ſituated on a ſmall iſland about half a mile long, lying off the S. E. end of this country. This caſtle ſtands about twenty yards from the ſea, and ſeems to be of a different kind from any others in the country, there being no ditches round it; but I can trace a ſlight ſtone dike that has encompaſſed it. This caſtle is by far the moſt entire of any in this country, it being ſtill forty-five feet high. It is built round a circular court twenty feet diameter. You enter through

the wall from the side next the sea by a low door into the court, on the opposite side of which is a door raised three feet from the ground which leads to the stair. The stair is placed at the heart of the wall, and leads up by high narrow steps to the top of the building. The thickness of the wall is sixteen feet. The whole height is divided into stories about five feet high. Each of these stories or galleries go round the building in the heart of the wall, except where the stair interrupts. In the inside of the building there are three ranges of square holes, each range going from bottom to top, which divide the whole structure into three unequal segments. These holes are separated from each other by one or two stones thickness, and are from eight inches to a foot square. I imagine they have been intended for throwing missile weapons from, in case of the enemy getting possession of the court. The galleries are divided from one another by broad thin stones, which form so many floors and roofs. The building on the outside appears to taper considerably till within one third of the whole height, when it goes up perpendicularly, and rather seems to fall without the plumb. The inside wall is plumb. What makes me imagine that this has been the seat of their prince, is that the place next adjacent to it is called Conengsburg, which is the Norwegian term for king's seat." All these buildings he remarks are of dry stone.

THIS structure is evidently of the same general class with that at *Dun Aggleſgog* in Rosshire [c]; and I regret that my ingenious correspondent has omitted to mention either the name of the structure itself, or that of the island on which it is placed. That a place so exceedingly incommodious, for an habitation as this must evidently have been, should be the residence of any

[c] It seems more like the Dune of Dornadilla described and engraved, vol. V. p. 216. pl. XVIII.

person,

perſon, far leſs a king, in a ſtate of ſociety in which the art of building had been carried to ſuch a point of perfection, appears to me extremely improbable; and that a place intended for defence ſhould have holes only on the inſide for diſcharging miſſile weapons, where danger could hardly ever be apprehended, and none upon the outſide where they would have given the enemy much greater annoyance, is ſo contrary to the common ſenſe of mankind, as would alone be ſufficient to invalidate that conjecture, even although the ſize and form of the holes themſelves, ſo exceedingly ill adapted to that purpoſe, did not furniſh another inſuperable argument againſt that opinion. That theſe were intended ſolely or chiefly for watch towers or beacons, on which fires ſhould be lighted to ſpread the alarm in caſe of an invaſion, ſeems to be as improbable as any of the other conjectures, although I find it is very univerſally prevalent; for what could have been the uſe of erecting ſuch ſuperb and coſtly ſtructures for that purpoſe in the north of Scotland, where the tops of high hills afford as conſpicuous places without any expence as could have been obtained by all the art of man? And that this was no part of the intention of thoſe who built them is moſt manifeſt from the ſituation uſually choſen for theſe buildings, which for the moſt part is a hollow or at moſt the ſide of a mountain. I never ſaw one that could have been ſeen at any conſiderable diſtance, ſave that at Dunrobin in Sutherland, and even that can be ſeen at a diſtance only from one ſide; and I have ſeen others which could not be ſeen from above two hundred yards on any ſide, as is particularly the caſe with that near Dunbeath in Caithneſs.

THESE reaſons, with others which might be offered, induce me to reject all theſe opinions with regard to the intention of theſe ſtructures, and adhere to the one I formerly advanced, viz. that they had been places of worſhip, according to the rites

of Scandinavia. The holes and all the other appurtenances, for which we can discover no use on any other hypotheses, present no difficulty when viewed in this light, as they may have been necessary for the performance of certain religious rites of which we have no longer any sort of knowledge. The form of the structure, especially if we suppose it was wholly or partially darkened from above, is exceedingly well adapted for impressing the mind with that reverential awe so necessary for giving magical rites their full impression. And these holes by admitting lights artfully placed we can easily conceive might be so managed as to give the most irresistible effect to such supernatural representations as the priest might choose to exhibit; and if we add to this the effect that might be produced by voices or other sounds issuing from those concealed galleries, we may figure to ourselves a *tout ensemble* that might overawe the most daring philosopher in modern times, and sink almost into total annihilation the minds of ignorant Barbarians, who were firmly convinced that these effects were produced by those supernatural beings they were taught to adore. In these circumstances we feel the propriety of the epithet that Ossian bestows upon these very structures, for such I think it reasonable to suppose was what he calls *the horrid circle of Brumo.* What a jest are all the childish fooleries of modern priestcraft, intended to impose upon and overawe the weakened judgement, when compared with these all-powerful incantations of Antient Scandinavia!

You will please to observe, that the description of this tower tallies much more exactly with that at Dornadilla in Caithness, than with either *Dun Agglesgag* or *Dunrobin*; the first having galleries and distant ranges of internal windows, which are wanting in the two last. The two first, it is probable, were royal places of worship, the cathedrals of Pagan times, in which the religious rites were performed by the *Archimagus* himself in

 their

their highest splendor. The others were probably places of distinguished note, yet of an inferior class; and others, more humble still, have probably been allotted for vulgar use, which are now in a great measure buried in ruins.

EXCUSE the length of this letter, and pardon the conjectures it contains. I give them only as conjectures, which I shall chearfully renounce as soon as I meet with others that are supported by more rational arguments. I ever am, with the most sincere esteem,

Dear Sir, your most humble servant,

Monkshell, Aberdeenshire,
Sept. 30, 1779.

J. ANDERSON.

X. *Observations on the vitrified Walls in* Scotland, *by the Hon.* Daines Barrington. *In a Letter to the Secretary.*

Read February 15, 1781.

DEAR SIR,

I SEND herewith a drawing of what is ſuppoſed to have been a vitrified fort on the S. W. end of the iſland of Bute, and which ſtill goes by the name of Dunagoyle. I am obliged for this elegant and accurate plan to Sir David Dalrymple, one of the lords of Seſſion, who was ſo good as to tranſmit at the ſame time one of the vitrified ſtones, of which parts of the wall were compoſed.

THESE ſuppoſed forts, thus built, have lately much engaged the attention of the Scotch Antiquaries, particularly Mr. John Williams (a mineral engineer), who publiſhed a pamphlet on the ſubject in 1777; as alſo Mr. Freebairn, whoſe ſentiments on the ſame head are to be found in the minutes of the Society, June 17, 1779. To theſe I may add a diſſertation of Mr. Anderſon's in the Vth vol. of our Archaelogia, p. 255. and a ſecond by the ſame gentleman immediately preceding the preſent paper.

ALL theſe ingenious antiquaries agree in ſuppoſing, that theſe walls were only vitrified, becauſe the natives of N. Britain, at that time, did not underſtand how to make what we at preſent call cement; that, in moſt of the few which remain, the vitrification only takes place on one ſide; that they are ſituated upon inſulated hills of a very conſiderable height; and that they were uſed as places of defence.

WITH regard to the first of these particulars, I should conceive, that if one side of the wall only was heated, and to any height, the matter in fusion would all drop down to the bottom, and therefore could not operate as a cement to fill the interstices of the loose stones.

IN relation to the second circumstance, I have myself been twice in the Highlands of Scotland, and have seen very few hills of any height which were cloathed with wood; the trouble therefore of carrying it up to the top of such a mountain would be considerable; nor do I very well understand how the walls being vitrified on one side only, added much to the strength of the post against an enemy.

MR. WILLIAMS, indeed, after having observed the third particular of their being intended as fortresses, was sensible that water was requisite, if the place was to be held for any time; he therefore informs us, that there are dried wells within these forts. In answer to which I would observe, that shelter from the weather is also necessary (during a siege) upon the top of a bleak Scotch hill, whilst whisky (or a succedaneum for it) would be often in greater request than the bare element of water.

As I therefore cannot entirely subscribe to the opinions of the before mentioned antiquaries, though supported with much ingenuity, I shall without difficulty state my own hypothesis, be it never so erroneous; for, in many matters of antiquity, he who guesses best does best; nor is demonstration often to be produced on any side.

As I have travelled the most mountainous circuit of Wales for more than twenty-one years, I have frequently seen stone-walls like those in the present drawing, and upon inclosures of a much smaller compass. There is a long tract of such in the western part of Merionethshire, very near to the sea [*a*].

[*a*] It is called Dufflyn, which signifies in Welsh *The Vale*.

WHEN

WHEN I first observed these small inclosures made with thick walls of loose stones, I could not comprehend how it could be worth while to make so formidable a fence to such a small compass of ground. Upon examining however the adjacent country, I found it almost entirely covered with such loose stones, and that therefore the smaller the piece of ground to be cleared the less expensive the removal. For the same reason, such dry walls are often of a great thickness, and sometimes the corners of the inclosure are filled with stones to a great width, this being the only possible means of procuring pasture.

THUS likewise, and for the same reasons, this practice is very common in the Highlands of Scotland; and lord Bredalbane (at his most capital place of Taymouth) hath for many years employed a labourer solely in blasting [*b*] large pieces of stone dispersed over some of his fields, which then became manageable, and may be used in the stone enclosures of the same piece of ground.

BUT it will be urged, that the stones of the fences in question are vitrified; which observation, indeed, is unanswerable, if the expence of vitrification was incurred merely to make these supposed fortresses more strong. But may not this vitrification have been occasioned, either by vulcanoes, or what are called *bloomeries?* The same effect may be produced likewise on dry walls of stone, by lightning passing along them. The loose stones in either case would not be rejected, because they were glassy, and would be piled up in the fences of the inclosure; as the great point upon these occasions is to clear the ground, and remove the incumbring stones to the smallest distance.

ONE of the advocates for the designed and not fortuitous vitrification, says, that the pieces he had procured did not resemble what is called *lava*; but every vulcano is not necessarily an Etna,

[*b*] He is therefore called his lordship's blaster.

or

or a Vesuvius; and, consequently, the matter disgorged from the crater, must perpetually vary, both in substance and form. Vitrified masses larger or smaller, will likewise be produced by the same means.

IT may be contended indeed, that pasture thus procured, by clearing the ground, would be more convenient at the bottom or sides, than on the top of the hill. But to this I answer, that in rocky countries you must get what pittance you can of soil, and often it will happen, that the only detached and removable stones are on the summit.

WHEN such inclosures have been made, they become very convenient for putting cattle into; and hence perhaps some of the wells which Mr. Williams hath mentioned.

I SHALL conclude these observations, by suggesting, that if vitrification answered the purpose of cement, it is very extraordinary, that the antient inhabitants of Scotland did not apply it to the houses or huts in which they constantly lived, but reserved this expensive and troublesome process merely for a fortification, which might not perhaps be used in a century against an enemy.

Believe me, dear Sir,

Your most faithful servant,

DAINES BARRINGTON.

P. S. I hope the Society will do me the honour to accept of the drawing and specimen of vitrification.

XI. *Obser-*

XI. *Observations by Sir* Henry Englefield, *Bart. on the antient Buildings at* York, *&c. In a Letter to the President.*

Read January 27, 1780.

SIR,

THERE is no task more painful than to contradict the assertions of learned and ingenious men; yet, as the detection of error is at least as necessary to the advancement of knowledge as the investigation of truth, I hope I shall stand excused to this Society for the reasons which I now mean to offer for my dissent from the learned Drake, with regard to the Roman antiquities supposed by him to be now existing at York. The first of which I mean to speak is the tower and wall of the Mint Yard, spoken of in high terms by Dr. Lister, and engraven in the Eboracum. This I carefully viewed, but could not see the least difference either in material or construction from the rest of the city walls; except the courses of Roman brick mentioned to bond the work in two places. But I am far from looking on such courses as a certain mark of Roman work, the ingenious Mr. Essex having fully proved brick to have been made by our Saxon ancestors, and I myself having seen four courses of thin and fine brick ranging round the keep of Chepstow castle about twelve feet above ground; nobody will, I believe, attempt to ascribe the last mentioned building to the Roman times.

BUT

But the arch in Micklegate Bar is what I principally mean to treat of; the description of it being more minute, and the building itself of much more consequence. It is indeed, as Mr. Drake says, a true segment of a circle, and the material is the grit-stone; but Mr. Drake, like many men of real genius, warmed with his subject, and willing to give it every advantage in his power, seems totally to have forgotten that the Saxon and Norman buildings are all raised on segments of circles, and many of them in this country entirely built of grit. Kirkstall abbey may serve as proof (if proof was necessary) of both these assertions. But, besides this, Bootham Bar has an arch almost exactly similar, and built of the same material; and I think that one more of the gates of York is also round-arched; yet nobody has thought of referring either of these to Roman times. The superstructure of both Micklegate and Bootham Bar is of limestone, being evidently of much later date; perhaps the lime, when the grit ceased to be used in buildings, might afford matter of curious investigation.

A further reason, and which appears to me of very great weight, indeed, against the Roman antiquity of Micklegate Bar, is, that it is evidently at this time quite out of ground, the basement being a foot high, which I believe there is not an instance of in any building to be referred with certainty to the Romans. The horrid waste and desolation which ensued on the termination of their empire over us, the repeated fires of the Saxons and Danes, have raised the soil of our cities to an almost incredible height. The arch at Lincoln is buried almost to its impost; the bath in the Precentor's house is far below the bottom of his cellar, though on the very brow of a steep hill down which the ruins must have rolled in some measure. The arches at Canterbury are nearly in the same state; and indeed

the Roman inſcriptions found at York are uniformly diſcovered in digging cellars and foundations. How then is it poſſible for this arch alone to have emerged from the maſs of ruin that covers the other remains of antient Rome in our iſland, and to ſtand alone on the level of our preſent ſtreets?

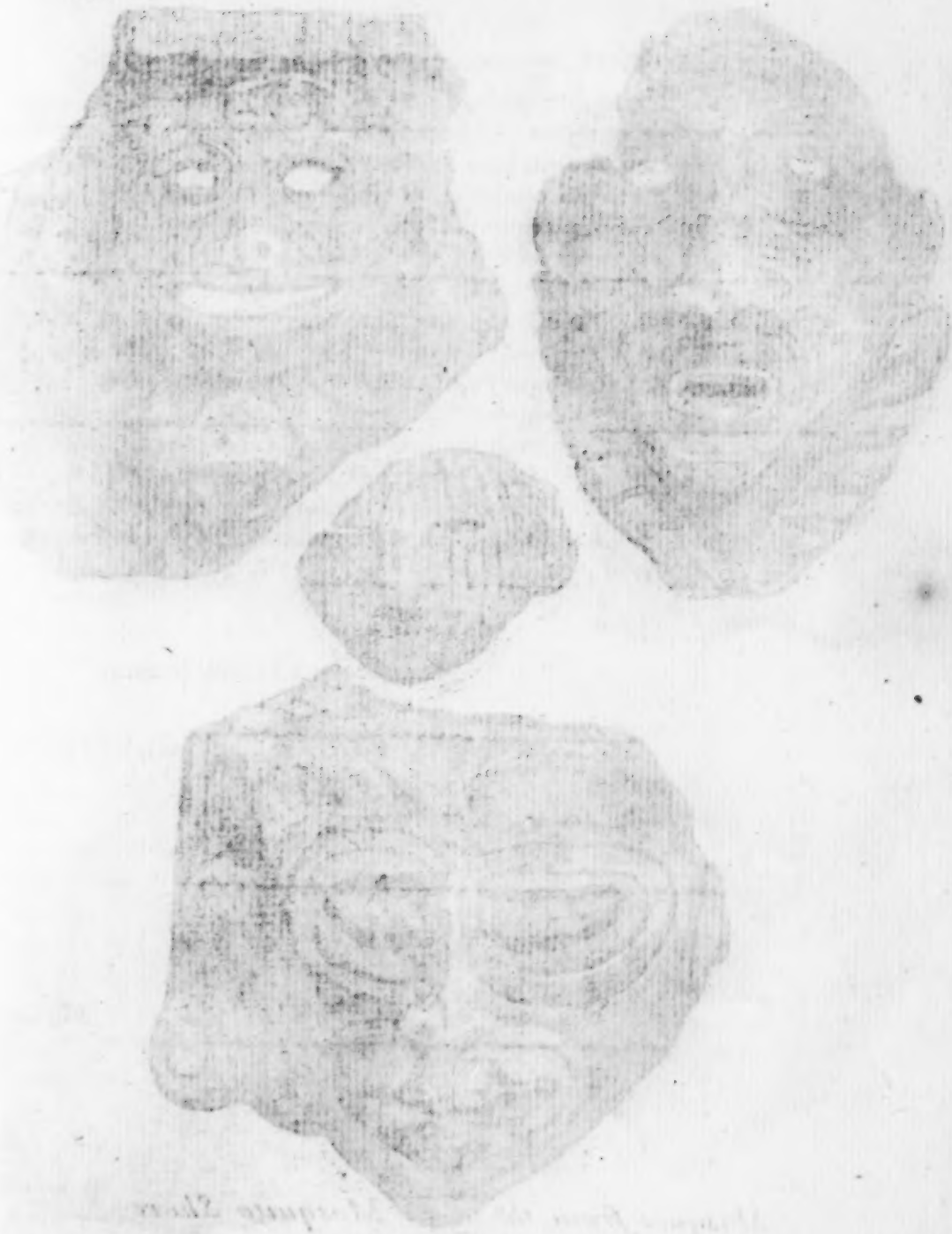
I MUST not omit the very reſpectable authority of lord Burlington, adduced by Mr. Drake in ſupport of the antiquity of the Bar. Nobody can have an higher opinion of his lordſhip's ſkill in architecture than myſelf, but perhaps the ſtudy of Greek and Roman antiquity had rather been an hindrance to his forming a proper judgement of the different ſtyles of architecture in the lower ages, than any help to him in that reſpect. And the great name of Inigo Jones need but be mentioned to bring to the mind of this Society, how deplorably it is poſſible for the moſt eminent genius to err when endeavouring to wreſt facts in ſupport of a preconceived ſyſtem.

I am, Sir,

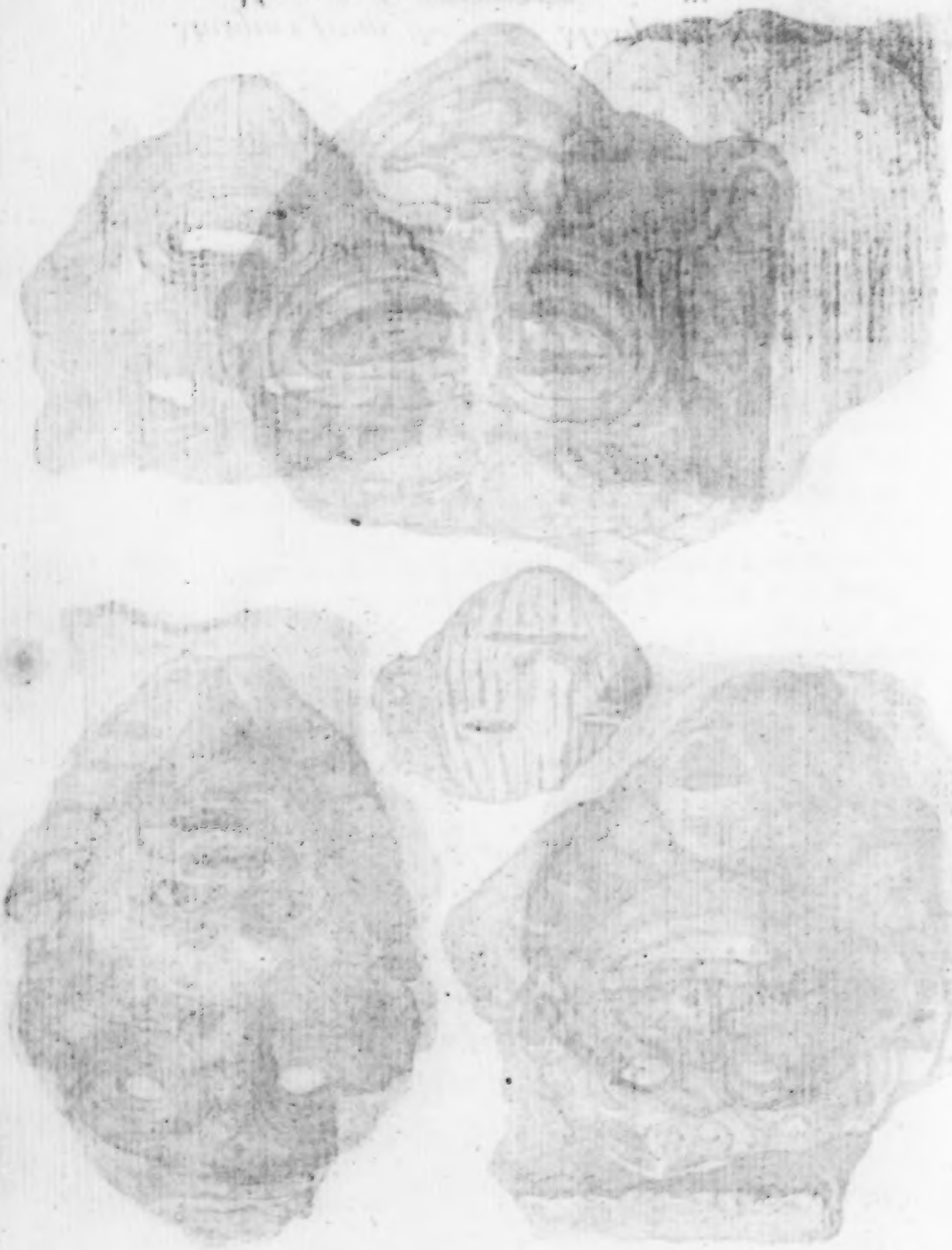
Your obedient humble ſervant,

HENRY C. ENGLEFIELD.

XII, *An*



Masques from the Mosquito Shore.



Masques from the Mosquito Shore.

XII. *An account of certain earthen Masks from the* Musquito Shore. *By* Charles Rogers, *Esq. In a Letter to the President.*

Read April 6, 1780.

SIR,

BY the favor of Daniel Braithwaite, Esq. a gentleman who lives in the city, I lay before you and your Society several pieces of Terra-cotta brought from the Musquito shore about the year 1775 [a].

THEY were sent by a very intelligent gentleman who had long resided in that country, and gave the following account of them.

IT is not doubted that the natives had formerly many arts among them which have been lost several centuries, and are known to have ever existed by tradition only, and by a few specimens still scattered in the internal, and at present uncultivated parts of that district.

As this gentleman had frequent opportunities of travelling over the solitary regions which lie between the Spanish settlements and ours, and as he could speak the language of the natives, he became better acquainted with their ideas of the ancient splendor of their country than other Europeans, whose

[a] See plate XI.

 connexions

connexions with these people are confined to the sea-coast only, could possibly acquire.

He had the curiosity, under their directions, to take a journey into the interior parts of the country, of seventy or eighty miles; and, guided by them, he found, on digging, many curious pieces of antiquity, but most of them too massive to be removed; and, amongst the rest, a prodigious quantity of such masques as are here exhibited; which, his Indian conductors told him, were the likenesses of chiefs, or other eminent persons who had been formerly buried there; and that it was sometimes their custom to mix gold dust with the clay of these portraits, which were, in general, heads or busts only, and often entire figures. These were placed at the heads of the deceased, whose bodies were inclosed in a fine earth of red porcelain elegantly ornamented. This was in the refined and flourishing æra of their country; but now these ill-fated and unpolished Indians consign their dead to a common grave.

One thing is observable, that the present race of natives have not the least knowledge of the art of making these masques; nor of forming a composition, which is likewise found with them, or near the places where they were discovered, and which is so hard that no tool, how finely soever tempered, will make the least impression on it.

To the above account may be added, that one of these pieces is an entire foot, which, if it were Roman, would be called a votive foot; another is a head with swollen eyes and nose, and a sore crown, which would likewise be thought votives of a person recovered of these disorders; and a third represents two children who probably died young.

Many of these terra-cottas have their backs concaved in a cylindrical form, by which we might imagine they were parts of sepulchral urns, if we had any authority for such a supposition.

SEVERAL of the maſques are evidently of faces tattood; a practice long diſuſed on this ſhore.

IT is remarkable that ſome of theſe greatly reſemble thoſe publiſhed by Ficoroni, in his large collection of the ſcenic maſques of the ancient Romans; many of which maſques are alſo in terra-cotta.

I am, Sir,

Your moſt obedient and

moſt humble ſervant,

Laurence Pountney Lane,
March 6, 1780.

CHARLES ROGERS.

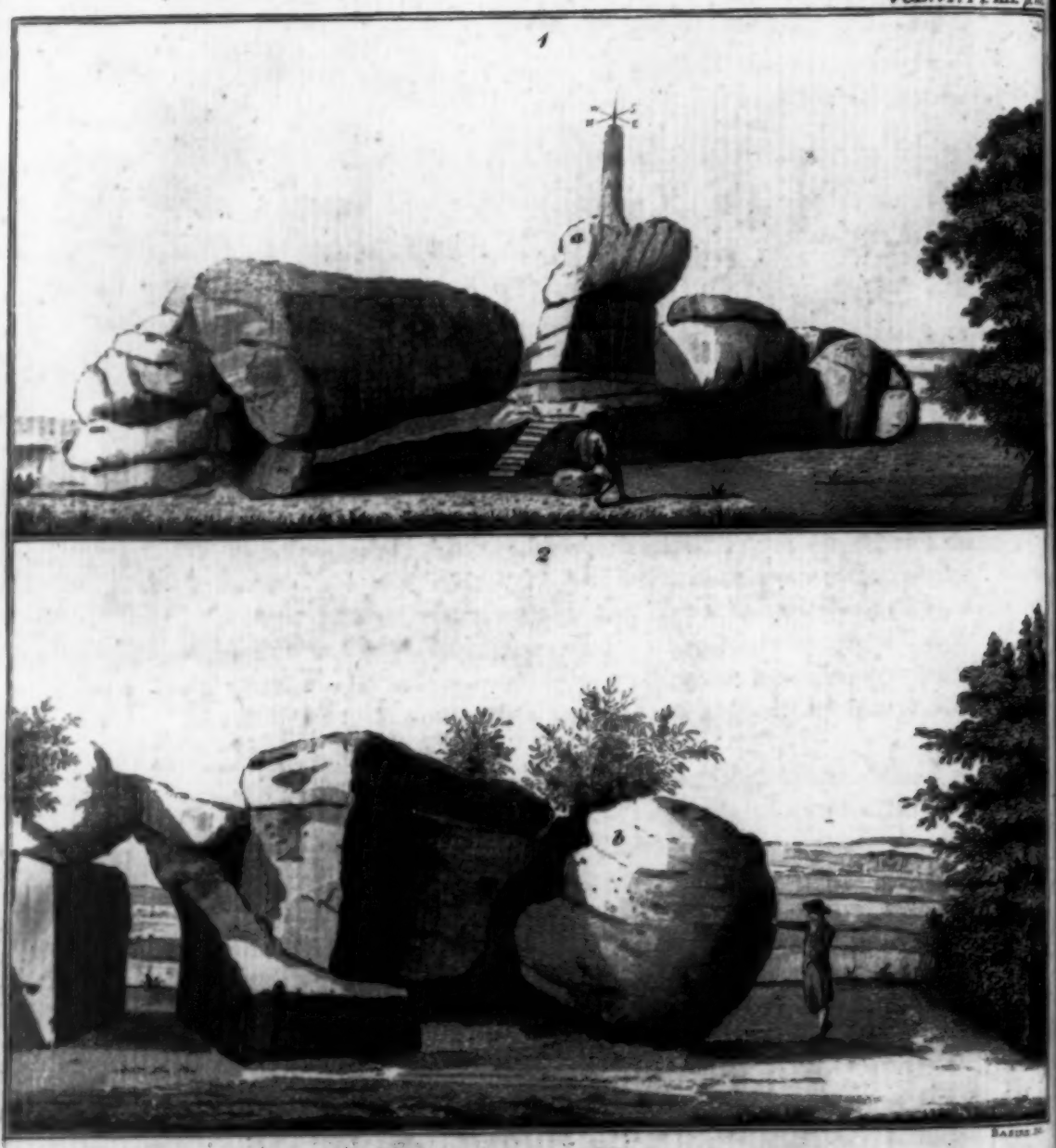
XIII. *An account of ſome Druidical Remains on* Stanton *and* Hartle Moor *in the* Peak, Derbyſhire. *By* Hayman Rooke, *Eſq.*

Read April 6, 1780.

STANTON Moor is twenty-four miles from Derby, twelve from Cheſterfield, and four from Bakewell, a wild uncultivated waſte, very high land, rocky, and produces a coarſe kind of ſedgey graſs; it is about two miles in length from north to ſouth, and near one and a half in breadth from eaſt to weſt; bounded on the north by Rowſley, on the eaſt by Darleydale, a beautiful valley, finely diverſified with woods, villages, and rich paſture, and where the Derwent forms a meandering courſe from north to ſouth; it is bounded on the weſt by Hartle Liberty or Hartle Moor.

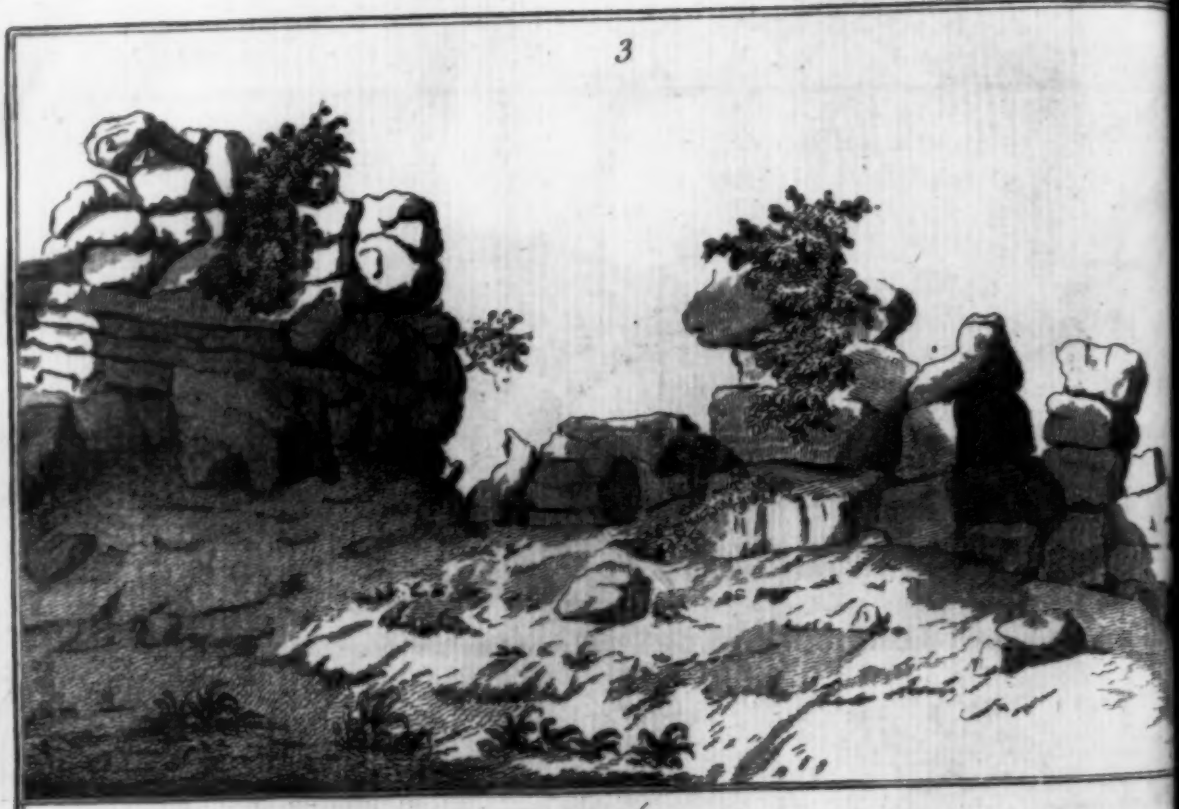
AT the ſouth end of Stanton Moor, cloſe to the village of Birchover, is a very ſingular maſs of large rocks, called *Roulter*, *Rowter*, or *Roo-Tor*; whence Rowter means a moving rock, ſince in the provincial dialect they will ſay a thing *roos* backward and forward: now this *Roo* is no other than *Rou*, it being the uſual pronunciation of the country, the inhabitants generally omitting the final *l* and *ll*; wall, they pronounce *wo*; hall, *ho*; fall, *fo*, &c. Theſe rocks ſtand on the top of a hill, commanding an extenſive view over the moor, and ſeem to have been a place much frequented by the Druids.

PLATE



N°. 1. South View of Rowtor Rocks. N°. 2. S. W. View.

3



4

N.o 3 N.W. View of Rowtor Rocks. N.o 4 Bradley Rocks.

ſtone nine feet by ſeven feet eleven inches; the diameter of the baſon at the top two feet ſeven inches by one foot eleven inches; the other four are on the top of Carcliff. N° 2. ſtands cloſe to a precipice, too hazardous to meaſure. The ſtone N° 3. is ſeven feet in length, diameter of the baſon two feet. The ſtone N° 4. is five feet, the baſon two feet ſix inches. The ſtone N° 5. is nine feet four inches, the largeſt baſon three feet diameter, the other two feet. Theſe baſons appear to have been the work of art, and have in many places the marks of the tool. On the eaſt and weſt ſide of Stanton Moor are ſeveral large rocks and ſtones, none of which have baſons, nor are they to be found but on rocks that ſtand on hills, and in the neighbourhood of Druidical remains.

Plate XIV. N° 6. is a ground plan and view of a hermitage in a cave at the foot of Carcliff rocks. At the eaſt end of the cave is a crucifix, the figure three feet high, cut out of the ſolid rock in high relief, the ſculpture not bad; on the top of the croſs there appears to have been ſomething like letters, but now ſo defaced by time as not to be made out; on the left hand of the crucifix is a niche, as if intended for a ſtatue. Facing the entrance are the remains of ſeats hewed out of the rock. The length of the cave from eaſt to weſt is eleven feet; depth to the ſeats marked 1 nine feet, from the ſeats to the corner five feet. This little receſs ſeems to have been the bed place of the hermit, and has been ſeparated from the ſeats by rails, as appears from the holes marked 2. Height of the cave ſeven feet.

Plate XV. N° 7. is a view of a Druid temple of nine ſtones on Stanton Moor, about half a mile north of Rowter. It is called by the country people the *Nine Ladies*. At thirty-four yards weſt of the temple is a ſingle ſtone, which they have named the *King*. The diameter of the circle eleven yards; the ſtones are about two feet ſix inches high; there appears to have been one in the centre. Near it are ſeveral cairns; one had been opened a

few

7

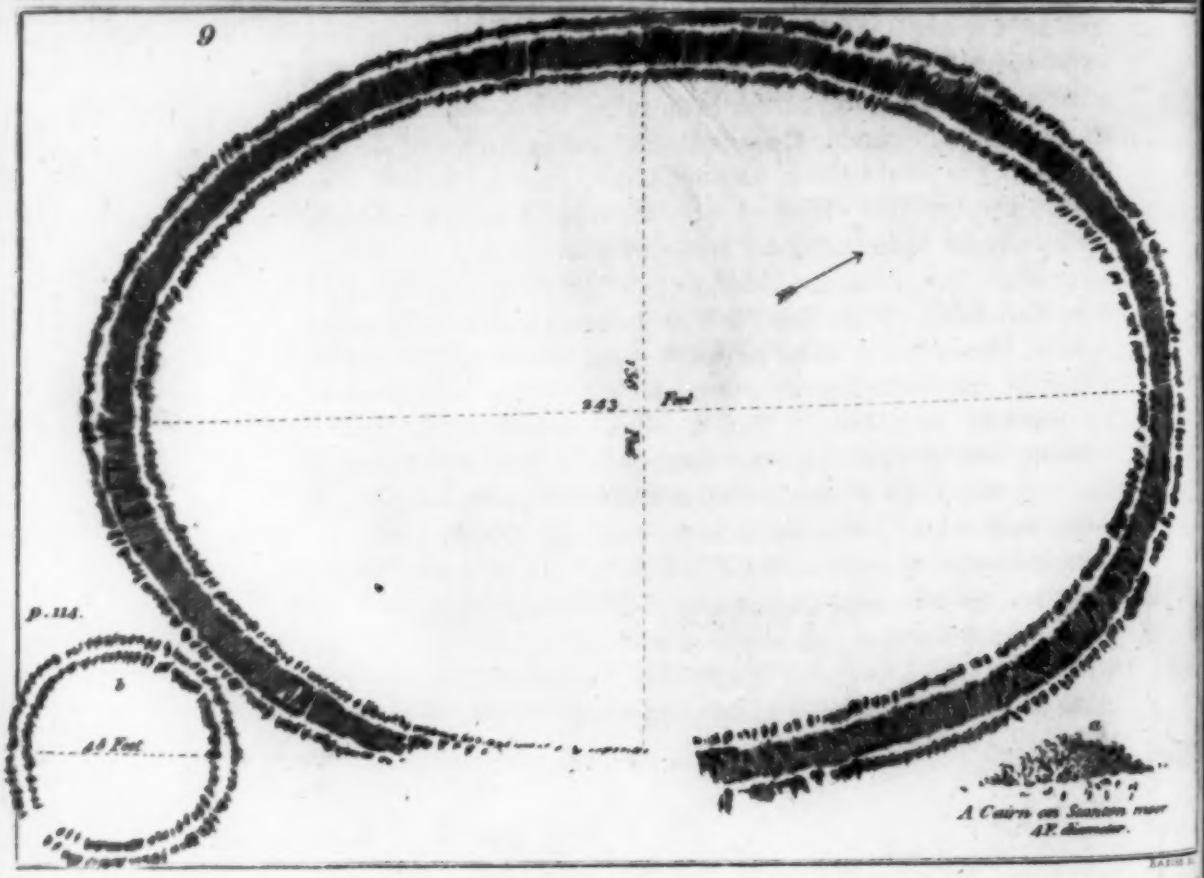
8

BASIRE Sc.

Druidical circles of Stones, on Stanton Moor.

10

9



few years ago, and much rummaged: bones were found with a large blue glaſs bead with orifices not larger than the tip of a tobacco-pipe. One of theſe cairns 40 feet in diameter is engraved in Plate XVII. a.

Plate XV. N° 8. is a view of the remains of another Druid temple on Hartle Moor, about half a mile weſt of the Nine Ladies. It conſiſts at preſent only of ſix ſtones; but the field they ſtand in goes by the name of the *Nine Stone Cloſe*, and if we may judge by the eye, there were formerly that number. The height of the talleſt ſtone is ſeventeen feet; at ſeventy-five yards ſouth ſtand two ſtones ſomewhat ſmaller.

Plate XVI. N° 9. is a plan drawn by a ſcale of 40 feet to an inch of a circular Britiſh work called *Caſtle Ring*, about two hundred yards north from the above mentioned temple, and a quarter of a mile weſt of the little valley which ſeparates Hartle Moor from Stanton Moor. It has a deep ditch and double vallum; the entrance is very viſible on the ſouth eaſt ſide, where part of the vallum has been levelled by the plough. The diameter from north-eaſt to ſouth-weſt is one hundred and forty-three feet, from ſouth-eaſt to north-weſt one hundred and ſixty-five feet. As no coins or Roman utenſils have been found near it, there ſeems to be ſufficient grounds to ſuppoſe it to be a Britiſh and not a Roman encampment. It has been thought by ſome to have been a Daniſh work; certain it is that the Danes ſecured themſelves for ſome time in Derby, after they had driven out the Saxons; but as this place is a great diſtance from that town, from its vicinity to many Druidical remains I ſhould rather ſuppoſe it to be Britiſh.

N° 10. is a view of *Cats Stones*. At the eaſt ſide of Stanton Moor are three very remarkable ſtones; they ſtand at the edge of a declivity looking over Darleydale, and about a quarter of a mile from each other in a north and ſouth direction. They have

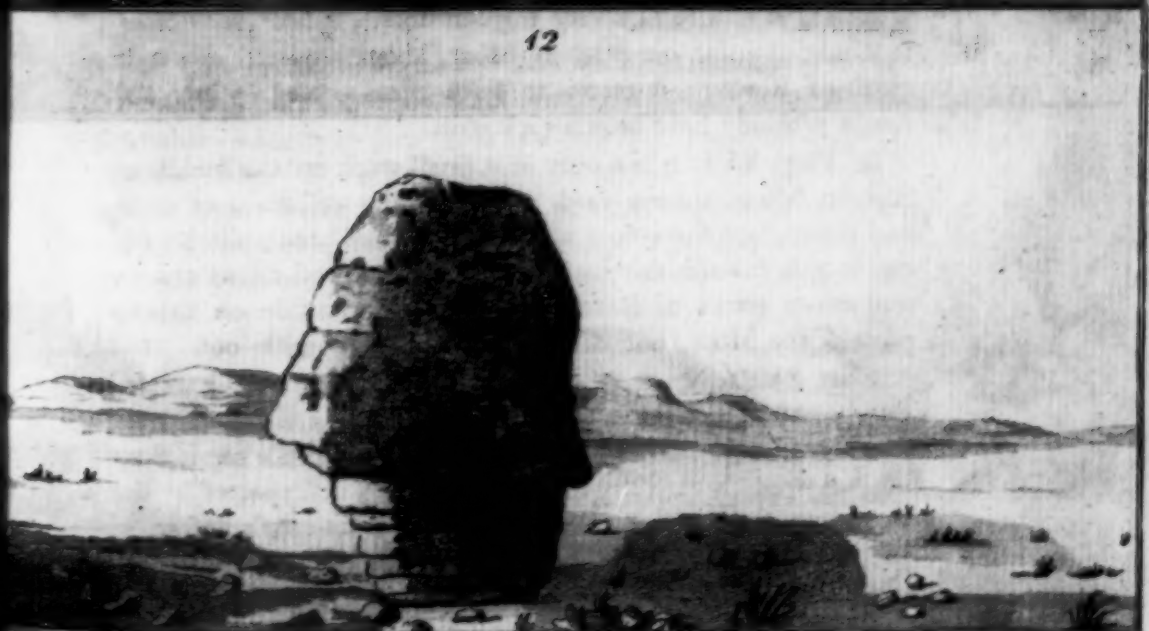
at a diſtance much the appearance of towers: that to the ſouth is called *Cats Stone*, and has a road leading to it cut through a ſurface of looſe ſtones and rock: this was evidently intended as an approach to the ſtone, where it ends, and meets a precipice.

Plate XVII. N° 11. is a view of a ſtone called *Gorſe Stone*, with Cat Stone at a diſtance marked 1. This name is undoubtedly derived from a Britiſh word *gorſed dau* (ſetting aloft). Doctor Borlace ſays, in his Antiquities of Cornwall, that the Druids had places of elevation "called *gorſed dau*; in ſome "places they were made of earth, and ſometimes they were "upon high rocks, from whence they uſed to pronounce their "decrees." Now no place ſeems to be better calculated for that purpoſe, or for their inaugurations, than theſe ſtones; the other, which is the largeſt of the three, is called *Heart Stone*, and meaſures eighty-three feet in circumference.

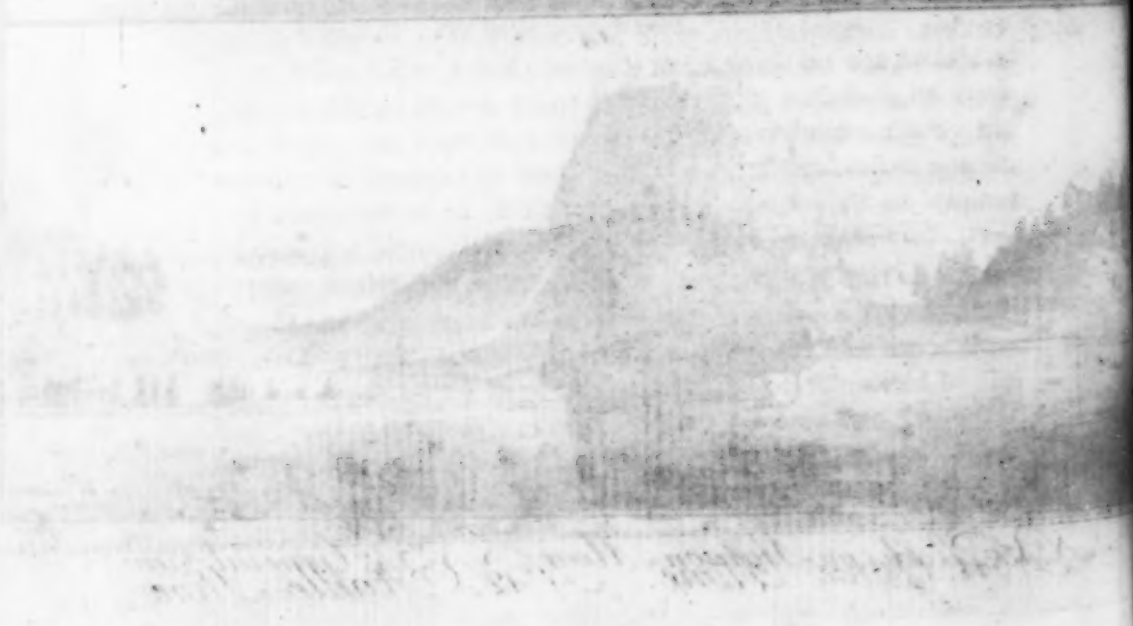
N° 12. is a ſtone of a very ſingular ſhape, called *Andle Stone*. It ſtands by itſelf on Stanton Moor, about a quarter of a mile north of Rowter; it ſeems to have been formed by art, and might probably have been a rock idol.

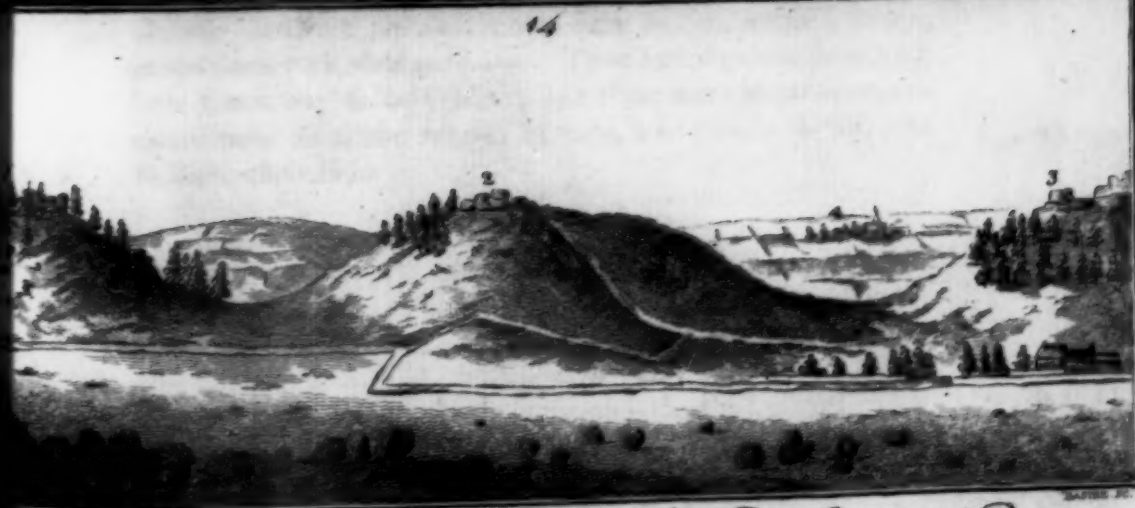
IN Plate XVI. b is a plan of a ſmall work on the middle of Stanton Moor, ſixteen yards diameter; the vallum is of earth and ſtones, but there does not appear to have been a ditch: the entrance is towards the ſouth. There are ſeveral cairns near it, and many traces of Britiſh works are perceivable on various parts of the Moor, but nothing perfect can be made out.

Plate XVIII. N° 13. is a view of ſome rocks in a ſmall encloſure at the north-weſt end of the Moor near the village of Stanton. The rock marked (1) is very remarkable; the top is ſloping, on which a very large ſtone marked (2) is ſupported by the two ſtones (3) and (4). From the form of theſe two, (which if they were turned on their edges might ſupport the upper ſtone in



N°. 11, Gorse Stone. N°. 12, Andle Stone.





No. 13, Rocks on Stanton Moor. No. 14. General View.

in the nature of a cromlech, whence one may reaſonably ſuppoſe the whole to have been a cromlech, by ſome means now thrown down), it certainly muſt have been the work of art. The Druids undoubtedly had a power (unknown to us) of moving very large ſtones, as is now viſible in many of their ſtupendous remains in England. The ground theſe rocks ſtand in belonged to the family of the Caltons, whoſe anceſtor about one hundred and fifty years ago had a Latin inſcription, cut in Roman capitals, on the two rocks N° 5 and 6, which is as follows: on N° 5, Res ruſtica quæ ſine dubitatione proxime et quaſi conſanguinea ſapientiæ eſt, tam diſcentibus eget quam magiſtris. On the ſtone N° 6, Nihil eſt homini libero dignius, et quod mihi ad ſapientis vitam proxime videtur accedere.

N° 14. is a north-eaſt view of the three hills at the ſouth end of Stanton Moor, on the top of which are the Druidical remains. N° 1. Rowter rocks; N° 2. Bradley rocks; N° 3. Carcliff rocks; N° 4. the village of Elton.

By the number of Druidical remains on Stanton Moor, we may reaſonably ſuppoſe this place to have been inhabited by the Druids. Here are temples, caves, rock baſons, rocking ſtones, gorſed daus, rock idols and cairns. Their ſacred groves have long ſince given way to cultivation; but their more durable monuments have ſtood the ravages of time, and remain as helps to illuſtrate their hiſtory.

XIV. *Observations on the word* Esnecca, *in a Letter to* Thomas Astle, *Esq.* F.S.A. *By* John Topham, *Esq.* F.A. *and* R.S.

Read April 13, 1780.

DEAR SIR,

I AM much obliged to you for the perusal of the inclosed beautiful and curious charter, which afforded me much pleasure and information; it containing the grant of an office, "*ministerium meum de esnecca mea*," which had never before occurred to my observation. It is in these words:

"H. rex Angl' et dux Norm' et Aquitan' et comes And'. "Archiepis, epis, abbatib', comitib', baronib', justic', vic' et "omnibus fidelib' suis Franc' et Angl' tocius Anglie et Norm', "salutem. Sciatis me reddidisse et concessisse Willo et Nicho-"lao filiis Rogeri generi Alberti et heredibus Bonefacii et Azo-"nis et Roberti et Radulfi fratrum ipsorum *ministerium meum de* "*esnecca mea cum liberatione que pertinet*; et totam terram Ro-"geri generi Alberti; et feoda omnia que ipse Rogerus tenuit "in capite de rege H. avo meo et de quocunque tenuisset die "qua fuit vivus et mortuus. Quare volo et precipio quod bene "et in pace et libere teneant, cum soca et saca et tol et team "et infangeneteof et cum omnibus illis quietanciis et consuet' "et libertat' suis cum quibus Rogerus gener Alberti melius et "quietius

" quietius tenuit tempore regis H. avi mei, in bosco et plano, " in burgo et extra, in feodis et firmis feodalibus, in aqua et " extra, in pratis et pascuis, in viis et semitis et in omnibus lo- " cis. Test. T. Cant' archiepo. H. Wint' epo, N. Eliensi, epo, " Ph. Baioc' epo, A. Luxon' epo, H. Abrinc' epo, T. Cancell'. " Regin' com' cornub', H. de Essexa, constab', Ric' de Hum' " constab', Warin' fil' Ger', camerario, Man. Biset dap' Rob' " de Dunestr' Ric' de Canvilla, Goc' de Baillolio, apud Oxine- " fordam."

This charter is without date, it having been made before the time when the insertion of dates in grants was generally used; but as remote and obsolete expressions are frequently the more readily explained when the time of their being used is known, I, in the first place, endeavoured to fix the date as nearly as I could by the time in which the witnesses to the deed lived. This I was enabled to do with sufficient exactness from the three first witnesses only, viz. Thomas Becket who was archbishop of Canterbury from the year 1162 to 1170. Henry de Blois bishop of Winton from 1129 to 1171. And Nigellus bishop of Ely from 1133 to 1169. These dates therefore fix the time of making the charter to be between A. D. 1162 and 1169, or the 8th and 15th years of the reign of king Henry the Second.

The office here granted by the king, " ministerium meum de *esnecca* mea," I could not so readily ascertain. I consulted some of our best Glossaries, Latin, Saxon and French, without receiving any information upon the subject of my enquiry. This drove me to have recourse to our ancient historians and early records; and these furnished me with the intelligence I sought for. The following authorities will not leave any doubt concerning the duty of the office in question.

THE ancient Dialogue of the Exchequer written by Gervaſe of Tilbury in the reign of king Henry II. the time of our grant, has this paſſage.

Lib. I. cap. vi. " Item ſunt ad ſcaccarium liberationes con-
" ſtitutae quae ſtatutis terminis, ſine brevi regis, ſolvuntur;
" *qualis eſt liberatio naucleri, cuſtodis, ſcilicet, navis regiae, quam*
" *eſneccam dicimus*, qui XII percipit quaque die; de qua et con-
" ſimilibus talleae fiunt a camerariis, quia de hiis brevia non
" habent."

IN ſupport and illuſtration of this paſſage the following proofs are adduced by the induſtrious Mr. Madox from the records of the Exchequer.

GREAT Roll of the Pipe 5 Hen. II. Rot. 6. a. The ſheriff of Devonſhire was allowed in his accounts " *in liberatione ſneccae* VII li. in transfretatione ipſius."

Ibidem, Rot. 7. a. The ſheriff of Hants was allowed in liberatione hominum *de Eſnecca*, C et II s. et VII d.

Ibidem 12 Hen. II. Rot. 8. b. The receivers of the town of Southampton were allowed in *liberatione Eſnecca* quando rex transfretavit in quadrageſima VII li. et X s. Et in paſſagio regis Scotiae VII li. et X s. per breve regis. Et in paſſagio domini Gaufridi filii regis *Eſnecca* et duabus aliis navibus X li.

Great Roll 22 Hen. II. Rot. 13. b. tit' Hanton'. The receivers of the ſame town of Southampton were allowed in *liberatione Eſneccae* quando filia regis transfretavit itura in Siciliam VII li. et X s. per breve regis. Et in liberatione ſeptem navium quae cum ea transfretaverunt X li. et XII s.

Great Roll 31 Hen. II. Rot. 14. b. tit' Hants. The receivers were allowed in *liberatione Eſneccae* quando dux Saxoniae et regina transfretaverunt VII li. X s. per breve Ranulphi de Glanvilla.

FROM theſe ſeveral proofs we may therefore conclude, that the office granted by this charter was to be maſter or keeper of the

the king's own ſhip or veſſel, with the livery and wages thereunto appertaining.

THE term *Eſnecca* did not include ſhips of every kind, but was confined to a particular ſpecies of ſhip or veſſel, and evidently here meant only thoſe appropriated for the king's own uſe; probably in the nature of the royal yachts now in uſe. The payment of the expences of theſe veſſels being expreſſly diſtinguiſhed from and larger than thoſe of the common ſhips.

ALTHOUGH the word *Eſnecca* is here uſed as a Latin word, yet I am inclined to think it was introduced to us from the Norman French; ſome inſtances occurring in ancient French manuſcripts of a nearly ſimilar word being uſed in the ſame ſenſe as the preſent.

IN a MS. of Philippus Mouſkes cited by Dufreſne in his Gloſſary ſub voce *Naca*, is this paſſage.

Prirent Galies et *Eſnekes* [*a*].
Bien batailles a breteſkes.
Et gens armees feleneſkes.
Qu'il orent tous es lius alvekes.

And again the ſame MS.

Galies et Bargas et Nes
Eſneques et Dromons fiers,
Roges et Buſſes et Viſſiers &c.

Dufreſne in his Gloſſary has the Latin words *Naca*, *Iſnechia* vel *Hilnachia*, as a ſpecies of ſmall ſhips or veſſels. And Mathew Paris has the word *Nacellas* in the ſame ſenſe. Edit. 1684, p. 689, "plures *Nacellas*, Cymbas, ſcilicet, aut Naviculas."

THE Saxon Chronicle anno 1052 has the word *Snecca*, as a ſpecies of ſhip. The Teutonic has the words *Snack*, *Sneck*,

[*a*] *Eſneke* ou *Eſneche*; ſorte de vaiſſeau de charge Lacombe. Dict. du vieux langage François. By this it ſhould ſeem a *tranſport*.

and

and *Snicke* in the ſame ſenſe. And Olaus Wormius in the ancient Daniſh language, has the word *Snekia* as a ſwift ſailing veſſel.

THUS, Sir, I have endeavoured to point out the nature of the office here granted by the king; and alſo the derivation of the word in which it is conveyed by a compariſon with different languages.

THE deed itſelf I cannot but deem to be a great curioſity, as it contains perhaps the only inſtance now extant of the preciſe grant of an office which once exiſted in this country, in terms now obſolete and entirely unnoticed by any modern writers or hiſtorians.

I am, dear Sir,

Your moſt faithful and obedient ſervant,

Gray's Inn,
April 12, 1780.

JOHN TOPHAM.

XV. *Obſervations*

XV. *Observations on the* Roman *Earthen Ware taken from the* Pan-Pudding Rock, *by* Edward Jacob, *Esq.* F. S. A.

Read April 20, 1780.

GENTLEMEN,

RELYING by our constitution upon the freedom of discussing subjects of antiquity with decency, and on the candour of Governor Pownall, I beg leave to offer some remarks upon his memoire on the Roman Earthen Ware, printed in the fifth volume of the Archaeologia, p. 282.

IT should seem that Mr. Pownall hath been misled into the notion of two different places being *one and the same*, by his brother's calling that where the earthen ware is *only* taken, by the name of Pudding-Pan-Sand or Rock. But the Pudding-Pan Rock (or as our people call it the Pan-Pudding Rock), and the Pan-Sand are distant from each other above three miles north east and by east. The Pan-Sand is close to and forms the north side of the Queen's Channel, consists intirely of sand, becomes dry for some part of every tide, and is *never* dredged upon by our fishermen. On the contrary the Pan-Pudding Rock is *never* dry. It is conjectured to be in length near half a mile, and in width about thirty perches; its surface is covered

 with

with loose stones of different magnitudes, every dredge net that was cast bringing up a large quantity of them. Its length runs almost east and west, and it lays right in the passage from the Narrows or the Woolpack to the Buoy of the Spaniards, and about six miles south east from the Reculvers, is well known to all our fishermen (as it often affords plenty of oysters) from its having about three or four feet water less upon it than the other parts thereabouts, excepting only one other rock called Hick-Mays at a small distance off that bears west by north from it.

WHEN the discovery of this curious and not inelegant ware was first made is uncertain, but I have in my possession some pieces which were dredged up above sixty years ago, and they continue to be acquired in small numbers to this day; for though I have been attentive to procure them, yet in the course of above forty years I have not to my recollection seen above sixty of them. The commissioner therefore was exceedingly successful in taking three intire pans besides fragments in so short a trial, whereas our fisherman hath for above these thirty years dredged upon and round this rock, and yet never procured more than one intire pan, though many fragments of them. He farther informs me that during the greatest part of last winter the fishing vessels of this town *only*, to the number of twelve or more, dredged for three days in every week upon and about the rock, and yet I cannot learn that above five or six of the pans have been brought hither.

AFTER reading Mr. Pownall's memoire I determined to take a trip to the rock, and in the month of July last on a fine day, went accompanied with the Rev. Mr. Thomas, late a member of the Society. No difficulty occurred in finding it, and we continued trying with the dredge-net for near three hours over and round about it, yet were we so unlucky as not to obtain even a single fragment of the pans; thus our disap-

pointment ſeems to confirm the commiſſioner's fiſherman's obſervation, that the pans were chiefly procured after ſtormy weather.

FROM our fruitleſs tryal (by which I conjecture that the pans are confined to a ſmall ſpace of the rock), and the great variety of the names of the potters impreſſed on the pans as given below, I am induced to think that the idea of a wreck is more conſiſtent than that which Mr. Pownall hath ſo ingeniouſly offered as a ſolution of the cauſe of theſe pans being there depoſited. Indeed I am apt to conjecture, that if he had had an opportunity of examining a greater variety of them, he would have ſaved himſelf the trouble of drawing up his curious inveſtigation, as, ſetting aſide the miſtake of the place, it ſeems founded chiefly upon his having ſeen the name of one potter only impreſſed on them, namely Atillianus, and a large piece of cemented brick-work. Now whether the cauſe of theſe curious remains of the Roman pottery diſcovered there was by a Roman veſſel freighted with theſe wares and caſt away upon this rock, as hath been the general opinion hereabout; or that there hath been erected upon this ſpot a ſtorehouſe or manufactory of this ware, and that Atillianus was director of the college of potters, and had his works there, is readily ſubmitted with the greateſt deference to the conſideration of the ſociety,

By their devoted humble ſervant,

Faverſham, Dec. 8, 1779.

EDWARD JACOB.

THE names impreſſed on thoſe pateræ in my poſſeſſion, which amount to twenty five, being all of the red earth and various ſhapes are,

ALBVCINI.	CARATIN.	MATERNI.
ATILIANI.	CARETI.	NAMILIAN.
ATRVCINI.	DECMI.	PATT:O.
CADANVS.	MARN:C.	SATVRNINI.
CINTVS.	MATERNNIM [*a*].	SEVERIANI.

IT is worthy obſervation that thoſe paterae which have rims to them, whether ornamented with a foliage or without, have no name impreſſed on them.

P. S. The Rev. Mr. Thomas ſince our viſit to the rock has collected amongſt the fiſhermen at Whitſtaple a dozen of theſe veſſels, and a curious thin [*b*] brown black one in the form of a ſugar baſon, having two handles and a foot to it, the diameter is about five inches, and its external circumference ornamented with a pretty foliage, which laſt piece ſince Mr. Thomas's death has come to my hands.

[*a*] This name is in a ſmaller type than the following with only one N.
[*b*] Or rather made of red earth covered with a black glazing.

XVI. *Obſervations*

XVI. *Obſervations on the* Roman *Earthen Ware found in the Sea on the* Kentiſh Coaſt, *between* Whiſtable *and* Reculver *on the borders of the Iſle of* Thanet, *by* George Keate, *Eſq.* F. R. *and* A.S. *In a Letter to Sir* Joſeph Banks, *Bart.*

Read April 20, 1780.

FROM an attentive peruſal of a paper relating to the earthen ware abovementioned, and which was publiſhed in the laſt volume of the *Archaeologia* [*a*], it appears to have been the idea of the gentleman who delivered in that paper to our Society, that there had been a Roman pottery eſtabliſhed near about the ſpot where ſo many earthen veſſels, and fragments of veſſels, are now from time to time dragged up by the fiſhermen of Whitſtable, on a place which they have, in conſequence of their diſcoveries, called the Pudding-Pan Sand, or Rock, ſituate, as I have always underſtood, between two and three miles from the ſhore.

THE common notion of the people in that neighbourhood, is, *that many years ago a ſhip freighted with this pottery was wrecked on theſe ſands*, which ſo much obſtruct the navigation of the Kentiſh Coaſt, and on which in ſucceeding generations ſo many unfortunate veſſels have experienced the ſame cala-

[*a*] Vol. V. p. 282.

mity.

mity. This is the plain natural account of illiterate and uninformed men, who know of no particular period of time to which they may refer this event; and nineteen times out of twenty the natural conceptions of mankind border the nearest upon truth. Refinements lead us but too commonly wide of the mark we aim at.

THE pieces which have occasionally been dragged up by the fishermens nets, bear many of them the unequivocal marks of having been long buried in the deep. The attachment of shell fish confirms the opinion, and there are but few pieces that have not their bottom-rim, or foot, broken by the continual fluctuation of the waters. They are indisputably of that species of earthen ware made use of in the time of the Romans; and the variety of names impressed on them, entirely Roman, put this matter out of controversy. The writer of the Memoir on this subject hath ingeniously aimed to make these vessels so discovered to be of the kinds used in the religious ceremonies of the Romans. The *patera* indeed was so, as we learn from the authority of history, and see confirmed by the valuable records of antient basso-relievos, which are possibly the most faithful monuments extant of the habits, usages, and customs, of antiquity. But though some of these vessels have the patera form, yet the greater part which have been found are of very different shapes and sizes, and evidently appear to have been made rather for culinary, than for religious purposes; they might have baked puddings and pies, stewed meat, or served for tarts or custards. And the unenlightened fishermen have very sensibly and very uniformly applied them to these purposes, till the ardour of the antiquary rescued them from their hands.

THE conjecture of the gentleman who gave in the paper alluded to, *that there was a manufactory of this pottery established on or near the spot where these vessels are now found*, wants a stronger foundation

foundation to build an opinion of this ſort on, than the *lump of cemented bricks* diſcovered in the hawl of a net. There is but little room to conceive that a manufactory of this kind was, or ever could be carried on in the middle of the ſea, and full as little reaſon to ſuppoſe that that element had made ſuch vaſt devaſtations on this part of the Kentiſh Coaſt, from which, in the neighbouring iſle of Thanet, on the Sandwich Flatts, and alſo all along Romney Marſh, it inconteſtibly appears to have in a very ſingular manner receded.

It may be aſked by ſome, how it could happen that this collection of pottery was never earlier diſcovered, ſince it muſt have lain here ſo many centuries? Every thing of this nature muſt be the meer event of chance, and chance only can decide it. It is very probable that the greateſt part of this collection might be deep buried in the ſands, and might remain there for a long courſe of years, till particular winds, acting in a particular manner on the waters, might not only waſh away the ſands which imbedded them, but alſo prove the means of carrying ſome of them to a diſtance from the ſpot where they originally might have lain. Added to this, the mode of fiſhing improves, as other arts do, in a commercial and poliſhed nation. If any particular object had carried the Whitſtable fiſhermen to this place three hundred years ſooner, there might not be a pan now left to exerciſe our opinions on: by the ſame rule it might have been reſerved for a diſcuſſable point at a future diſtance of time equally remote. Fiſh are well known to ſhift continually their quarters, they move from ſhoal to ſhoal, from ſand-bank to ſand-bank, and are poſſibly as capricious and variable as the inhabitants of the ſhores. Experience teaches the fiſhermen to purſue their motions, and it was probably in queſt of them that this Pudding-pan Sand was firſt ſtumbled on.

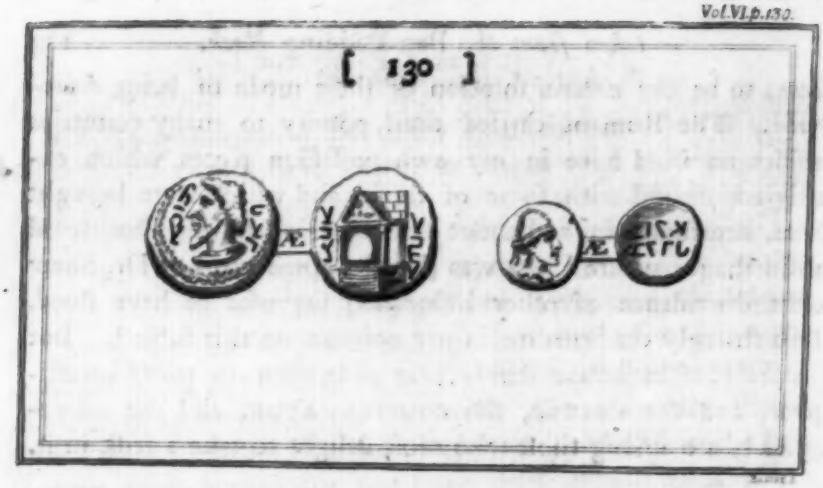
Mr.

MR. JACOB ſpeaks of the veſſels found at this place to be far more ſcarce than I have heard, or found that they are. He ſays, *that in forty years he hath not met with above ſixty pieces, and that a fiſherman in the courſe of thirty years working in and about this ſpot, never found but one pan that was entire.* I went to dine with the miniſter of Whitſtable in the ſummer of 1776, and being deſirous of gratifying the curioſity of ſome brother Antiquaries, I in leſs than an hour's walking among the fiſhermens houſes, purchaſed ten or twelve pieces, two or three of which were perfect and entire, and I am ſatisfied I might have brought away double that quantity, had I been diſpoſed to enlarge my collection.

THE fact is, here they are found, and are inconteſtably of Roman pottery. It is as clear a fact that wherever the Romans carried their arms they carried alſo ſome or many of their arts. Pottery was probably a conſiderable ſource of traffic, being one of the firſt wants of mankind, and one of thoſe things which was of the earlieſt invention. Had the variety of pieces here found been of one and the ſame manufactory they would, judging of things paſt as by things preſent, have all borne the name of the ſame maker, or probably of two or three, if there was a conſiderable partnerſhip. But Mr. Jacob gives us the names of fifteen different makers of ſuch pieces as are in his own poſſeſſion, and the names of fifty more may have been buried in the ſands of Kent. Mr. Jacob's account ſtrengthens the opinion that they muſt be the produce of different manufactories ſent to market, put on board a veſſel freighted for Britain, or for the uſe of ſome of the Roman ſtations in Kent. This brings them *naturally* on our coaſt, where they are as *naturally* wrecked; and where lying on theſe ſand banks where the Whiſtable fiſhermen have of late years dredged for oyſters, they have been *naturally* brought up by their nets. And this

ſeems to be the *natural* ſolution of their mode of being diſcovered. The Romans carried their pottery to many countries beſides ours. I have in my own poſſeſſion pieces which exactly correſpond with ſome of theſe, and which were brought from, and found in and about that ſpot in the neighbourhood of Carthage, where Utica was (by the conjectures of Dr. Shaw and the evidence of other hiſtorians) ſuppoſed to have ſtood. This ſtrongly confirms me in my opinion on this ſubject. But the field of *conjecture* ſtands ever wide open to every inveſtigator, and the CRITIC, the COMMENTATOR, and the ANTIQUARY, are among thoſe who moſt delight to take a friſk in it.

GEORGE KEATE.



XVII. *Nummi* Palmyreni *illuſtratio per rev.* Carolum Godofredum Woide, S. A. S.

INVENIT nuper doctiſſimus et rerum numiſmaticarum peritiſſimus, Carolus Combe, S. R. et S. A. S. in gazophylacio praeſtantiſſimo celeberrimi Guilielmi Hunteri, M. D. S. R. et S. A. necnon Societatis Regiae Scientiarum Pariſien. ſocii, *nummos*, quales in Europa nondum vidimus, *Palmyrenos*, cujus characteres cum alphabeto Palmyreno contulit, et cum eo convenire deprehendit. Apparet in his nummis caput barbatum ad ſiniſtram, cui tres literae a dextra et quatuor a ſiniſtra parte adjectae ſunt. Primam literam ר *jod* eſſe doctiſſimus Combeus recte aſſerit. Licet enim in alphabeto Palmyreno [Philoſoph. Tranſact. vol. XLVIII. pag. 693.] paulo aliter ſcribatur: attamen in ipſis inſcriptionibus Palmyrenis aliquoties eandem habet formam [*a*], quae in hoc nummo conſpicitur. Secun-

[*a*] Vide inſcriptionem, 11m lin. 7ma littera 1ma tab. xxiv. et tab. xxx. in medio lineae vlae.

dam

dam literam esse *he*; tertiam *thet*; quartam itidem *he*; quintam *thet*; sextam *jod*; septimam *lamed* esse deprehendent qui has literas cum alphabeto Palmyreno comparare volunt.

POSTICA nummi pars templum exhibet, in cujus medio lapis quadratus, symbolum divinitatis, cernitur: quod etiam aliis nummis vir eruditissimus comprobat. Ad utramque templi partem literae adpositae sunt quatuor ad dextram, et tres ad sinistram. Primam harum literarum esse *he*; secundam *shin*, quod cum sequenti litera per lineolam horizontalem connectitur; tertiam *mem*; quartam *he*; quintam *tau*; sextam *mem*, et ultimam iterum *he*, quivis concedet qui alphabetum Palmyrenum cum iis contulerit. Detectis itaque per doctiss. Combeum felicissime ex utraque parte nummi literis, nihil aliud superest, quam ut de significatione vocum, quas efficiunt, simus solliciti.

Et antica quidem pars nobis exhibet voces;

Haththil	Joheth
המיל	יהמ

Prior vox *Joheth* nomen proprium regis vel ducis Palmyreni esse videtur. Licet enim historia hujus regni nobis sit ignota, attamen haec vox e linguis orientalibus commode deducitur. يهط, apud Arabes et Samaritanos significat *prosternere*, *conculcare*, *confodere*, *occidere*: et hoc loco, vel *Jeheth*, יְהֵמ, quod est futurum, *conculcabit*; vel Joheth יָהֵמ, quod est participium praesens, *conculcans*, potest punctari. Hoc nomen duci bellatori convenit.

ALTERA vox *Haththil* habet *he* articulum sibi praefixum, et priori nomini proprio apposita est. Palmyrenos *he* articulum, quem Hebraei adhibent, etiam admisisse, ex inscriptionibus Palmyrenis aliquot exemplis potest probari. Ipsa vox est *Thil*, טיל, quae a verbo טול derivatur; quod apud Hebraeos *ejicere*,

dejicere, significat, et apud Arabes etiam adjectivum الطول הטול vel הטיל, *Hathtbil*, conservatum, quod *potentem* secundum Giggeum, et *indulgentem* in Alcorano denotat. Talia nomina reges Syriae et Parthiae adsciscere solebant, quorum priores multi επιφανεις posteriores μεγαλοι appellabantur.

In postica parte septem literae reperiuntur, quas sic divido:

Hattameh	Hashem
התמה	השם

Binae hae voces Hebraeis, Chaldaeis, Syris, et Arabibus non sunt ignotae; *nomen admirabile*, vel *venerandum* denotant, quod Lexica docebunt. Prior vox, *shem* שֵׁם, habet *he* articulum sibi praefixum *hashshem* הַשֵּׁם, et juxta genium linguarum Orientalium reddi potest *nomen illud* per emphasin. Nomen illud admirabile denotat nomen divinum, nomen Dei: quo sensu etiam vox שם *shem* apud Hebraeos, Chaldaeos, et Rabbinos, reperitur, et Deum ipsum designat; cujus rei exempla in Sacris Literis [*b*] et in Lexico Buxtorffii Chaldaico-Talmudico occurrunt, p. 2432.

Et notandum est, plures inscriptiones Palmyrenas hanc phrasin in initio exhibere: *timor nomini benedicto*, id est, *timor Deo* debetur.

Alius nummus Palmyrenus [cujus figura exhibetur N° 2. p. 130.] in eodem locupletissimo gazophylacio asservatur, in cujus antica parte est caput imberbe pileo conico tectum ad dextram. In postica parte octo literae apparent, quas ulteriori examini reservamus, et submittimus.

[*b*] Deut. xxviii. 58. ad reverendum nomen hoc honorandum et timendum, Jehovam, Deum tuum. Quod in Hebraico est השם הנורא, *Hashshem, Hanora*, in nostro nummo השם התמה *Hashshem Hattemah* exprimitur.

XVIII. *Four*

XVIII. *Four Letters from* Beaupré Bell, *Esq. to* Roger Gale, *Esq. on the Horologia of the Antients, with Mr.* Gale's *Answer.*

Read December 14, 1780.

SIR,

SINCE my last, I have received from an ingenious friend the following inscription, made use of in building the Benedictines church at Taloire (an inconsiderable village, half a league from Annecy, a town upon the lake of Annecy) which he observes not to be published with due exactness by Gruter.

HOROLOGIVM . CVM . SVO . AEDIFICIO . ET .
SIGNIS . OMNIBVS . ♋♋ . ET . ♑♑ . CLATRIS .
C . BLAESIVS . C . FIL . VOLTINIA . GRATVS . EX . HS . N̄ .
ET . EO . AMPLIVS . AD . ID . HOROLOGIVM . ADMINIS .
TRANDVM . SERVM . HS . N̄ . IIII . D . S . R .

I HAVE not any author that treats of the Horologia of the ancients, so am ignorant of what kind this could be; for were it of water, the length of the winter, and the severity of their climate, would render it useless full three parts of the year. Nor can I make any conjecture of the *aedificium*, the business of the servant who attended it, or the *signa*, whether that word imports statues, or coelestial signs. If you recollect any thing that may explain this inscription, do me the favour to inform me. 'Tis Petronius, I think, speaking of a person of quality, that

that tells us it was the whole employment of one of his ſlaves to proclaim the hours by ſound of trumpet; but I have no copy of him about me.

Mr. GALE's anſwer.

I WISH I could have found the inſcription you ſent me, either in Gruter, or any other author in my poſſeſſion; but in turning over all of them that I am maſter of upon that ſubject, *operam et oleum perdidi.* I was the more deſirous of finding it, becauſe I am pretty well ſatisfied that you have not received it rightly tranſcribed from your friend, though he accuſes Gruter of inaccuracy in publiſhing it. Few modern authors have wrote any thing worth notice, none as I know of, expreſſly *de Horologiis*; but all that has been ſaid upon that ſubject has been only *obiter*, as it has been accidentally thrown in their way, while they were peruſing other matters. The moſt that you will find of it is in the following:

Greenius, de Ruſticatione Romanorum, cap. 19.
Cruſius, de nocte, et nocturnis officiis, cap. 3.
Petrus Viola, de veteri novaque Romanorum temporum ratione, § de horis.
Magius, de Tintinabilis veterum, cap. 6.
Angelus Roccha, de Campanis.
Johan. Lawrentius, de annis, menſibus, et diebus.

But you have a much more ſatisfactory account of the ancient Horologia in Pliny, than can be collected from theſe authors; and in Vitruvius, from whom it appears, that the ancients had but two ways of diſtinguiſhing their hours; one by the ſun, the other by motion of water. The firſt was very irregular; for beſide their want of aſtronomy to adjuſt their dials according to the motion of the earth round that coeleſtial body, they divided their day into twelve parts, from ſun-riſe to ſun-ſet; ſo that

that the hours were longer in the ſummer than the winter, which was extremely abſurd, beſides their being totally at a loſs in cloudy weather. This obliged them to have recourſe to water machines, as of more regularity and certainty, to ſhew the hour. But to give you the introduction of the former, and progreſs of it at Rome, would be only to tranſcribe the 60th chapter of the VIIth book of Pliny; at the latter end of which, he tells us, that Scipio Naſica who was conſul with Laenas, A.U.C. DXCV. firſt divided the hours of the nights and days with a *clepſydra, idque horologium ſub tecto dedicavit*; of which ſort, I take that mentioned in your inſcription to have been; and *aedificium* mentioned in it, the ſame thing as Pliny's *tectum*. He does not tell us how the conſtruction of their ſun dials was performed; but they ſeem to have been adjuſted from the ſhadow of a pillar (which was the gnomon) projecting upon the ground, as from the *Columna Moenia* mentioned by him; and the great Aegyptian Obeliſk adapted to this purpoſe by the emperor Auguſtus in the Campus Martius. Vitruvius gives a large account of the water dials in the ninth chapter of his IXth book, and mentions the conſtruction of ſeveral ſorts of ſun dials in the eighth, to both which I refer you, as the compleateſt account given us of them by any of the antients.

BOTH ſorts ſeem to have belonged chiefly to the public, of which your inſcription is no ſmall confirmation. Few private men could be maſters of ſuch expenſive curioſities; the charge of making them, and the keeping a ſervant to attend them, as ſeems to have been neceſſary, was too great a burthen for a private purſe; and hence, I believe, came the cuſtom of having clocks for the moſt part in our church ſteeples, for the uſe of the whole pariſh.

GRUTER gives us an inſcription mentioning a *Templum Horologiare* dedicated *Jovi optimo maximo et Junoni Reginae, &c.* as

I quoted

I quoted from Pliny above, *Scipio Nasica id horologium sub tecto dedicavit:* both which are strong instances of their being looked upon as sacred, and that these monitors of time were kept in places religious; for I think *Horologiare Templum*, and *Horologium sub tecto dedicavit*, can import no less than a temple with such a device in it, and a *Clepsydra* dedicated under some building to defend it.

PETRONIUS ARBITER speaking of the elegant and expensive life of *Trimalchio*, in the passage you hint at, seems to sum up the whole idea of his magnificence, in describing him as *Lautissimus homo Horologium et Buccinatorem habet in Triclinio subornatum, ut subinde sciat quantum de vita perdiderit.* This, probably, was a *Clepsydra*; but the *Horologium* that he ordered to be placed upon his tomb, *ut quisquis horas inspiciet, velit, nolit, nomen meum legat*; was probably solar. Every body knows that Nero is intended and satyrized for his vain glory, luxury, and other vices, under the name of Trimalchio.

I WILL not take upon me to determine what were the *Signa* mentioned in this inscription. If they were statues, it is probable they had a relation to the machine, and might have been the *quatuor anni tempora*, or of the winds, which, as we gather from *Fulvius Ursinus*, *Donatus*, and *Marlianus*, were represented on the *Horologium* projected by Augustus, under the obelisk in the *Campus Martius*. *Horologium superioribus annis erat effossum: solum campi erat ex lapide quadrato, et habebat lineas distinctas metallo inaurato, et in angulo quatuor erant venti, ex opere musivo, cum inscriptione* BOREAS SPIRAT. *unde in omni latere simile quoddam dictum olim expressum conjicio:* and *Varro* calls the octogonal tower of the winds at Athens, mentioned by Vitruvius, *Horologium*, because there was on every face of it a sun dial, some lines of which are still visible.

PETRONIUS, in his relation of Trimalchio's whimsical supper, gives you a dish of a honey-comb, laid upon a turf in the middle,

middle, to repreſent the earth, and garniſhed with the twelve ſigns of the Zodiac, or rather ſomething alluding to them: *Repoſitorium rotundum* XII *habebat ſigna, in orbe diſpoſita.* Would not a man of ſuch an elegant taſte have thought theſe ornaments as proper for his clock, as his table?

THE *Aedificium*, or *Tectum*, was to protect the *Clepſydra* from the coldneſs and accidents of the external air. Under ſuch a cover the liquor might be always kept in a pretty equal temper and fluidity, by the means of fires or ſtoves in the winter, and excluſion of the ſun in ſummer; and the word *adminiſtrandum*, in the inſcription, may have a view to that performance.

THE *Clatri*, or *Clathri*, I think to have been rails fixed round the *Aedificium*, to fence it in from the ſtreet where it was built; like the *cancelli* mentioned upon an altar, found a few years ago at *Dorcheſter*, in Oxfordſhire, and publiſhed in Mr. Horſley's Brit. Rom. p. 339. 352. *Jovi optimo maximo et numinibus Auguſti M. Varius Severus B. coſ. aram cum cancellis de ſuo poſuit.* Theſe fences were ſo ſacred, that they worſhipped a *Dea Clathra, clathrorum et cancellorum dea*, who had the guard of them.

IT is the end of the third line that cauſes me to ſuſpect your copy of this inſcription to be imperfect, as I ſaid before. It ends EX. H. S. N. *ex ſeſtertiis nummum*; the figures denoting the number being plainly deficient, and, perhaps, defaced or broken out at the corner of the ſtone by ſome accident, for we find the number of the ſeſterces expreſſed in the fifth line HS. N. IIII. though I am not without my ſcruples as to a defect there alſo, or that the number IIII has not been rightly tranſcribed; ſince four ſeſterces, at the higheſt eſtimation, amounts to no more than thirty-two pounds five ſhillings and ten pence, and would purchaſe a very poor maintenance for a public ſervant to give conſtant attendance upon this machine; and if we ſhould read theſe numerals IIII, *ſeſterciorum numm. quatuor millia*, as the

line drawn over them may seem to intimate, the sum would be no less than thirty-two thousand two hundred and twenty-one pounds, fifteen shillings and four pence, which exceeds all reason, and cannot be allowed.

I CANNOT but think this inscription has been cut upon the stone originally after another manner, and in shorter lines than as it has come to your hands, and that it concludes thus,

SERVM . HS . N̄ . IIII.
D . S . R.

And so some numeral note that might have augmented the sum (of the small sesterces) might have been likewise lost at the edge of it; the placing of the D.S.R. *de suo restituit*, is much more usual in a line at the bottom by themselves, than in the same with any letters preceding. You have in *Reinesius' Syntagma* an inscription, but much mutilated, which mentions an *Horologium a novo restitutum.*

IT is, as I suppose, wrote SERVM instead of SERVVM in the original; and that the business of this servant was to watch and take care of the *Clepsydra*, and give notice to the town, like Trimalchio's boy by some signal, how the hours passed away.

THE hours were notified to the consuls and praetors in court by their *accensi*, or cryers. There is a remarkable passage in Pliny, lib. VII. c. 60. which shows the ignorance of the Romans in the art of dialing. The cryer gave the consul notice when it was mid-day, and the last hour of the day only by his observation of the appearance of the sun *inter rostra et graecostasin*, and *a columna Moenia ad carcerem inclinato sydere supremam pronunciabat.* Varro tells us, *praetorem accensum solitum esse jubere, ubi ei videbatur horam esse tertiam, inclamare horam esse tertiam; itemque meridiem, et nonam.* In public affairs, a public officer was ordered to cry the time of day. See Fabretti Inscript. p. 433. de accensis.

TRIMALCHIO'S

TRIMALCHIO's boy proclaimed his loſs of time more magnificently, by the ſound of a trumpet; and perhaps the *aes thermarum* in Martial might be a trumpet, for Virgil calls a trumpet ſo. *Aere ciere viros, martemquē accendere cantu.* Aen. vi. 165. but the word *aes* is of ſo large and extenſive a ſignification, that it is impoſſible to determine it to a particular inſtrument; and in the epigram it may import no more than the tinkling of a braſs baſon, to give notice when the baths were to be ſhut up: *redde pilam, ſonat aes thermarum.*

VITRUVIUS in his ninth book, c. 9. directs the placing of the wheels and tympana in one of his *clepſydra*, to be *ad eundem modum dentata, quae una motione coacta, verſando faciunt effectus, varietateſque motionum in quibus moventur ſigilla.*

AGAIN, in his, *Horae deſcribuntur, quas ſigillum egrediens ab imo virgula ſignificat per totum diem.* Theſe ſigilla were diminutive *ſigna*, or little images for pointing out the hour of the day marked upon a column; and why might not Varro's *Luciſer* and *Veſper* be moved by ſuch ſort of mechaniſm? (De re ruſt. M. 5.)

Deſcriptio XII *caeleſtium ſignorum ſit figurata, cujus e centro deformatur cujuſlibet ſigni ſpatium, &c.*

Mr. BELL to Mr. GALE, in anſwer to the preceding Letter.

I RECEIVED the entertainment of your curious letter concerning the ancient Horologia in due time, for which I ought long ago to have returned my ſincereſt thanks, but hope you will pardon my ſilence, which has been entirely owing to ſome excurſions I have made, both by the invitations of my friends, and the fine weather, at Cambridge. I ſpent ſome hours with our friend Mr. Baker, but had the ill fortune, at that very time, to miſs the ſatisfaction of waiting on you; for Mr. Gale,

your ſon, aſſures me you were then in the univerſity: I hope, fortune will be ſome time more favourable.

WHAT you have ſaid concerning the Taloire inſcription is extremely ſatisfactory; from any other gentleman, I ſhould have been ſurprized to have ſo much learning ſummoned up almoſt extempore on ſo dry a ſubject. I have ſince met with a deſcription of the clepſydra by which the lawyers declaimed in cauſes after evidence was given, and which thoſe long-winded gentry complained of as a cramp to their genius.

Sic rurſus praeconis amplo boatu citatus accuſator quidam ſenior aſſurgit, et ad dicendi ſpatium vaſculo quodam in vicem coli graciliter fiſtulato, ac per hoc guttatim deſluo, infuſa aqua, populum ſic adorat [a].

Which ſhows that it conſiſted of a ſingle tube, not a double one like the hour-glaſſes now in uſe: and the following paſſage from Pliny informs us, that they were of various magnitudes, but none of them ran above twenty-minutes, or ſo much, if for *decem* you read *duodecim* with ſome manuſcripts. *Dixi horis pene quinque; nam decem clepſydris quas ſpatioſiſſimus acceperam ſunt additae quatuor* [b].

THE curve of a veſſel might eaſily be known wherein the water ſhould eaſily decreaſe equal ſpaces in equal times, and the hours be found by its perpendicular attitude; but this ſeems not to have been practiſed by the Romans.

MY enquiries after coins, in my journeys, have not been without ſucceſs; for, beſides a Decentius, Marius, and Quintillus, I have picked up half a ſcore of Carauſius, one of which has the wolf and twins, but the legend ſo defaced, that I can make nothing of it. I am, Sir, yours, &c.

BEAUPRE BELL.

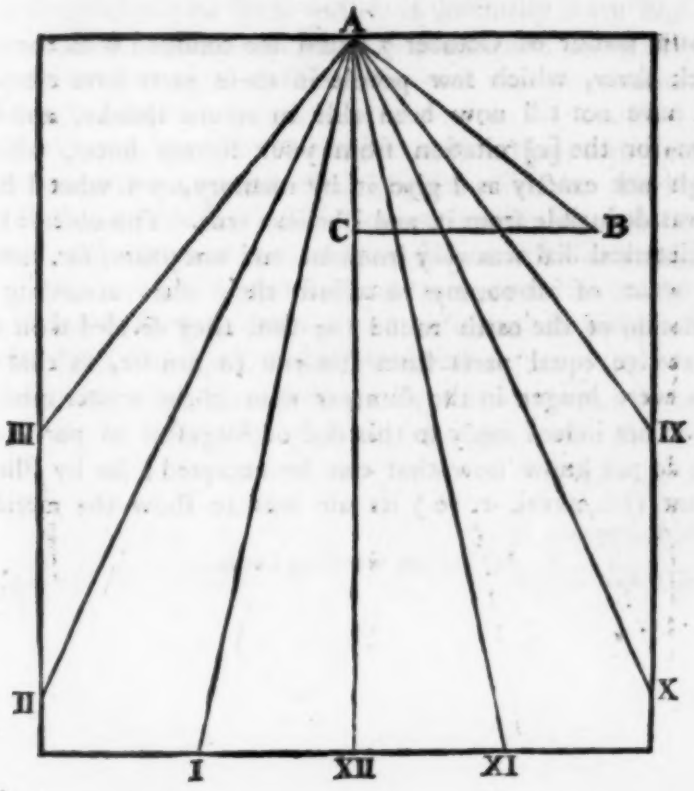
Stanford, Auguſt 24, 1735.

[a] Apul. Metam. iii. [b] Plin. Epiſt. lib. ii. 11.

Third

Third Letter from Mr. BELL to Mr. GALE, concerning the inſcription upon the Horologium at Taloire.

I MADE my excuſes to you while at Stamford, for deferring my thanks for your curious diſſertation on the Taloire inſcription. I hope, that letter came to hand, leſt you ſhould ſuſpect me of a voluntary neglect. It is now time to have done with that inſcription, but obſerving your remark, that the dial of Auguſtus muſt be liable to great variation, becauſe its ſtyle was placed perpendicular to the horizon, I take the liberty of adding an horizontal one for the latitude of Cambridge, 52°. 12′. whoſe ſtyle is perpendicular, yet, I believe, accurate; which, though I propoſe, I do not ſuppoſe the Romans were acquainted with this piece of mathematicks.



Erect the line CB for the perpendicular ſtyle of any height, and at the point B, make an angle equal to the complement of the latitude 37. 48. which will give the point A, which will repreſent the centre of the earth; and AB the ſtyle of the dial, or axis of the earth. From this point A all the hour-lines are to be drawn, according to the rules of dialling; this being done, the ſtyle CB ſet up perpendicular to the plane in the line A. XII. and at the diſtance AC will be the end of the ſhadow, only give the hour. Yours,

B. Bell.

Beaupré-hall, near Wiſbech,
September 29, 1735.

Fourth Letter from Mr. Bell, concerning the Horologia of the ancients.

Your favour of October 7 found me confined with the epidemick fever, which few people in theſe parts have eſcaped, and I have not till now been able to return thanks, and beg pardon for the [c] citation from your former letter, which, though not exactly as I give it by memory, yet what I have ſaid was deducible from it, and I believe true. You obſerve that the ſcioterical dial was very irregular and uncertain, for, beſides their want of aſtronomy to adjuſt their dials according to the motion of the earth round the ſun, they divided their day into twelve equal parts from ſun-riſe to ſun-ſet, ſo that the hours were longer in the ſummer than in the winter months. You do not indeed apply to this dial of Auguſtus in particular, but I do not know how that can be excepted; for by Pliny's account (lib. xxxvi. c. 10.) its uſe was to ſhow the meridian

[c] See the preceding Letter.

hour,

hour, the increaſe and decreaſe of days, and the ſun's place in the ecliptick by the length of the ſhadow: and yet Pliny eſteemed this, which might be done without one bit of aſtronomy, *digna cognitu res, et ingenio foecundo.* I can ſay nothing to the additional machinery of Manlius, for I do not underſtand the paſſage. What I aſſerted of the variations of the dials of the antients with perpendicular ſtyles, is certainly true, when the hour-lines are drawn from the foot of the ſtile as from a centre; for ſuch hour-lines muſt be drawn by obſerving the ſhadow of the ſtyle at every hour of the ſame day, and therefore continually vary, and ſhew the hour exactly, only on the return of the day whereon the lines were drawn, and ſuch, I apprehend, were the dials of the antients; for had they known the way of drawing the hour-lines from the true centre of the dial, which is the interſection of the axis, or inclined ſtyle, with the dial-plane, they would undoubtedly have had dials with inclined ſtyles, which, as they had not, thoſe they had muſt continually vary, and ſhow the true time only on one day of the year.

Vitruvius ſays, they had horizontal, vertical, and declining dials, but gives no manner of deſcription of them. He has indeed ſhewn the manner of making an horizontal one for the latitude of Rome, and two or three places, by a perpendicular ſtyle, but theſe could not be of more uſe than that of Auguſtus, therefore confirm what I obſerved, that the dials of the antients muſt be ſubject to daily variation.

XIX. *Account*

XIX. *Account of an Hiſtorical Monument in* Britanny. *By Monſ.* D'Auvergne.

Read February 8, 1781.

RETURNING in December 1780 from viewing antiquities in the neighbourhood of the *Morbihan*, late the *Mare concluſum* of Cæſar, I took in my way the town of *Ploemmel*, famous in the hiſtory of the province for having been the ſeat of the foreign dukes, when Britanny maintained its independance.

ON the road about midway between *Ploemmel* and *Jocelin* another ſmall town, about ſeven Engliſh miles diſtant from the former, upon a ſmall open heath I ſaw a low croſs on a pedeſtal. As it appeared of different ſtructure to the numerous croſſes ſeen on the highways in this country, and had the appearance of antiquity, I rode up to it and was not more ſurprized than pleaſed to find it a monument commemorating one of thoſe partial combats ſo frequent in the ſixteenth century. I was the more intereſted in its particular inveſtigation on being informed by a learned prior of the Carmelites who accompanied me, that the Engliſh were combatants on the one part againſt the Bretons on the other.

As I did not recollect in my readings, ever to have heard this anecdote noticed, except by Voltaire in his "Elements de l'Hiſtoire

Drawn on the spot by R.S. Auvergne 1791. Basire S.

Ancient Cross in Bretagne.

"Historie Universelle;" but his historical facts are so frequently doubtful, that on his authority alone I gave but little faith to it; my friend the priest procured me a copy of an antient manuscript dated 1470, whence I composed the anecdote of the combat referred to by this monument, and which I find agrees with the facts stated by *D'Argentré, Dom Morice, et Dom Lobineau*, illustrious historians of Britanny.

The annexed sketch (plate XIX.) is an exact representation of the cross with its pedestal, and inscription, taken literatim on the spot. It may be observed that the numerical word *trante* is spelt differently from the present acceptation of the "*Dictionaire de l'Academie*," but is conformable to the vicious provincial dialect, which the few who used the French language in that age spake, and still retained in this part of the country.

The cross and pedestal are of a grey granite, of which the neighbouring hills appear composed, and of which the antient and modern buildings in the towns of Jocelin and Ploemmel are constructed. The inscription is on the face of the pedestal opposed to the south, and appears to have been cut in the stone with the point of a tempered instrument, the letters ill formed and irregular. A literal translation of these lines runs as follows:

"To the perpetual memory
"of the battle of the thirty
"that my lord Mareschal
"of Beaumanoir gain'd
"in this place the year 1350."

The whole is near seven feet high, but little defaced by time. Indeed it appears, that the intermediary commissaries of the states of the province, by a vote of that assembly proposed by a patriotic antiquary, expended twenty-four livres five sols, in the year 1776 [a], to clear this monument from briars and

[a] This sum is a small fraction more than one guinea.

weeds that concealed it from public view, and to whitewash the pedestal, and black the letters to make the inscription more legible. Dom Lobineau, in the folio edition of his History of Britanny, Paris 1754, gives the names of the thirty Breton knights, who were the champions of their province on the occasion, and from whom most of the present noble and antient families of Britanny are descended. I could not discover more than two of the names of the thirty English heroes: one was Brembro', chief of the auxiliary troops furnished by king Edward of England to John of Montfort, to support his claim to the ducal crown of Britanny. The other Knolis, or Knoles, probably one of the illustrious predecessors of the noble family of Sackville-Dorset [*b*].

Historical anecdote from the antient Chronicles of Britanny. A. D. 1347 to 1350.

"THOMAS D'AGEWORTH was a commander in the auxiliary "troops furnished by Edward king of England to his relation.

[*b*] The author probably supposes this from the seat of the Sackville family at Knowle in Kent, agreeable to the French custom of joining the name of their estates to their surname. This Sir Robert Knolles was one of the most celebrated warriors of his time. Historians seem to have been at a loss for words to express his valour. Anstis says his military exploits were beyond imagination illustrious; another author calls him "egregius bellator", (K. 8. 76. in Coll. Armor.) and another says he was "le veritable Demon de la Guerre" (L'Hist. de Charles VI. par le Laboureur, p. 78.)

"O Roberte Knollis, per te fit Francia mollis
"Ense tuo tollis præda, dans vulnera collis."

He is said to have been of low extraction in Norfolk, but to have raised himself by his extraordinary bravery; he was lieutenant of Britanny under John de Montfort, and was appointed seneschal of Guienne by king Edward III. (see Les Rolles Gascons.) He died 8 Hen. IV. 1407, far-advanced in years, and was buried with Constance his wife in the White Friars, London, leaving an only daughter Emma his heir married to John Babington. The family of Knollys of Grove-Place in Hampshire claim to be a younger branch of this Sir Robert Knollys. J. C. Brooke.

"and

" and ally John of Montfort to support his pretentions to the " sovereignty of Britanny against Charles of Blois, who had " been taken by this same D'Ageworth, in the year 1347, and " was at this period a prisoner in the Tower of London; but " whose claims were supported by his partizans who continued " numerous in Britanny. A body of his army consisting of one " hundred auxiliary Frenchmen of arms, under the command " of a valiant adventurer of that nation, name *Cabours*, having " been sent to the neighbourhood of Auray [*c*], where D'Age- " worth was governor, to commit depredations upon the ter- " ritories protected by this chieftain for his sovereign's ally, " they were sallied out upon by D'Ageworth and his garrison, " composed of one hundred English soldiers. The conflict ex- " hibited prodigies of valour from both [*d*] auxiliary parties: " the great exertions however of *Cabours* decided the victory " in his favour, and put the lives of D'Ageworth and his " brave fellows in the victor's power, who inhumanely put " them all to the sword [*e*].

[*c*] A small antient town on the Morbiban sea, founded by the Veneti.

[*d*] It appears plainly that this was a French and English war carried on under a mask.

[*e*] This Thomas D'Ageworth as the Chronicles of Britanny call him, was Sir Thomas Dagworth of Dagworth in Suffolk, knt. son and heir of John de Dagworth by Alicia de Bellomonte his wife. He was one of the most celebrated warriors of his time. See Walsingham, Knighton, &c. the latter historian gives some account of his death by the treachery of the French, partly similar to the above. In 20 Edward III. he was appointed the king's lieutenant in Britanny, and afterwards to John son of John de Montfort duke thereof, see Les Rolles François for his appointments &c. in that country. He had a son Sir Nicholas Dagworth, knt. who was also a man of considerable note in his time, and much in favour with Richard II. The heir of this family married William lord Furnival of Sheffield, and carried the manor of Dagworth and a considerable estate into that family. J. C. Brooke.

" RICHARD BREMBRO' [ſ] an Engliſh chief, commandant " of Ploemel, and the friend of D'Ageworth, determined to " avenge his death. He ſent out the garriſon of Ploemel into " the neighbouring country to plunder and deſtroy every thing, " and murder every perſon without diſtinction of age or ſex; " exceſſes that revolt humanity, and can only be reflected upon " with horror, are ſaid to have been committed under this " cruel licence. The Mareſchal de Beaumanoir, one of theſe " heroes that are dear to humanity, who then commanded at " Jocelin for Charles of Blois's party, aſked a ſafe-guard of " Brembro' that he might meet him: which being granted, the " Mareſchal repaired to Ploemel, where he ſtrongly reproached " Brembro' with the barbarous ferocity that he allowed his " troops to exerciſe towards unarmed and defenceleſs inhabi- " tants. The haughty and vindictive temper of Brembro' bore " with impatience the ſtinging reproaches of the Breton, and he " ſpoke of their behaviour without reſerve, forgetting that it " was a party of auxiliary French adventurers that had murder- " ed his friend. The pride of the Marechal Beaumanoir made " him reply to Brembro' in the ſame tone. The diſpute grow- " ing warm, in order to terminate it, and repreſs the exceſſes " complained of, Beaumanoir is ſaid to have propoſed (as was " not unuſual in thoſe days), a partial combat between a cer- " tain number of champions of both nations, which challenge " being accepted by Brembro', thirty was fixed as the number " of combatants on each ſide, and the fifteenth day of March

[ſ] So the name is ſpelt in the manuſcript, but evidently miſtaken by the French writer, no ſuch name or any thing like it occurring in the records of that time. It is probable that the author has meant Sir Richard Grenacre, knt. who was a native of Lancaſhire, and flouriſhed in the French wars in this reign. This Sir Richard was made governor of Ploemel in Britanny abovementioned by Edward III. and it appears that the ſame thing granted him letters of protection on his departure for that country. J. C. Brooke.

" (Julian

" (Julian Calendar) A. D. 1530 appointed for the day: the " field of action to be on an high ground near the midway " oak [g] between the two garrisons. Preparations were ac- " cordingly made by each party. It being much anterior to " the use of gunpowder in Britanny, the champions were con- " sequently armed as was usual in those countries before that " period, with swords, lances and javelins. Beaumanoir appear- " ed there on the appointed morning, at the head of twenty- " nine of the most distinguished knights of his party. Brem- " bro' met him at the head of twenty-nine veteran English- " men. All the nobility of the province of both parties were " present at the important contest. The combat began, and the " combatants fought with unremitted fury, like the champions " of the honor of both countries, when probably more by a " stroke of fortune than address, Brembro' received a mortal " blow from the javelin of a chevalier de Montauban: many " more of his party being wounded and the rest exhausted " with fatigue, that fatal stroke threw them into disorder, and " they were vanquished.

" The remains of the Breton knights that fell in the con- " flict were carried to Jocelin, and there interred. Brembro' and " his unfortunate comrades were, it is conjectured, buried by " their dispirited survivors in the neighbouring enclosure, where " vestiges of sepulchral tumuli are yet seen, and which the pea- " sants from tradition call at this time *Le Champ des Anglois.*"

[g] An oak said to have been growing on the spot where the cross now stands.

P. D'AUVERGNE.

XX. *The*

XX. *The Commencement of* Day *amongst the* Saxons *and* Britons *ascertained. In a Letter to the Rev. Dr.* Lort *by the Rev. Mr.* Pegge.

Read February 15, 1781.

DEAR SIR,

THE beginning of *day* amongst the ancient *Greeks* and *Romans* (meaning by a day the νυχθήμερον, or the space of twenty-four hours accomplished by a single revolution of the sun, to speak vulgarly) seems to be very clearly understood and determined, and is of great use and importance in regard to the innumerable passages of their authors.

THE same may be said in respect of the *Hebrews*; but as to the *Britons* and *Saxons*, the matter appears to be very dubious and uncertain, or at least is made so by the suggestions of a considerable Antiquary, who declares, 'When our ancestors the '*Saxons*, or before them the *Britons*, began the day, I have no 'books to inform me [a].' This, however, is a point which ought to be ascertained amongst them, as well as other nations, and for the same reason; and therefore it shall be the business of this short memoir to illustrate this doubtful problem in the best manner I can.

THE learned Antiquary, in the uncertainty under which he laboured, offers a conjecture in the following terms 'but, from

[a] Peck, Desid. Curios. B. vi. p. 230. 4to Ed.

 'the

'the word *noon*, I conceive one or other of them, if not both, '[*Britons* and *Saxons*], began the day at twelve of the clock. 'The word *noon*, if I understand it right, signifies as much as '*novus dies* [*b*].' And to make way for this new etymology, he rejects the old one from *nona*, i. e. *hora nona*, in these words: '*Minshew*, I see, derives it from *hora nona*, the ninth canonical 'hour, which answers to our three of the clock in the afternoon. But this derivation I cannot agree to, because from 'time immemorial, the very use and acceptation of the word 'hath been otherwise. For, according to the common acceptation, and according to the sense of all the Englishmen or 'books I ever read or met with, it is as fully *noon* when the 'sun hath once reached the meridian as when the clock hath 'struck three.'

BUT other authors, as well as Minshew, and very respectable ones, deduce the word *noon* from *nona*: as Sir Henry Spelman [*c*], bishop Kennett [*d*], and Mr. Johnson [*e*]. Many write it accordingly *none*, as *Skelton* the poet [*f*], Hall in his Chronicle [*g*], and Dr. Plott [*h*]. The Saxon *non* [*i*] has the same original, and it amounts to the same thing whether our word *noon* be the Saxon *non*, or the Latin *nona*, since they both import *the ninth hour of the day*, and of consequence had no relation originally to the sun in his meridional altitude, but to the ninth hour, supposing the day to begin at six o'clock in the morning.

[*b*] Peck, Desid. Curios. B. vi. p. 230. [*c*] Spelman, Gloss. p. 428.
[*d*] Kennett, Par. Antiq. in Gloss.
[*e*] Johnson, Collect. of Eccles. Laws, a° 958.
[*f*] Skelton, p. 21. [*g*] Hall, in Rich. III. fol. 40. b.
[*h*] Plott, Nat. Hist. of Staffordsh. p. 441.
[*i*] Lye, Sax. Dict. v. Non. *Nain* in Irish is the evening. Lloyd, Archaeolog. p. 15.

I CONCEIVE

I CONCEIVE then, that this term came to denote the time of dining; first, because it was the hour when in fasting people were allowed to break their fasts, or the monks to eat their dinner, which was after *noon-song* [*k*], and secondly that by an easy abuse or *catachresis* the word was brought to signify twelve o'clock, the common hour of dining, in all cases. It is remarkable, that, for some such reason, eleven o'clock is *noon* at *Trent* [*l*]; so arbitrary are things of this nature!

THE ground or foundation of Mr. *Peck's* conjecture being thus overturned by establishing the old etymology of the word *noon*, in opposition to the fanciful one of *novus dies*, the conjecture itself must consequently fall; or at least we are at liberty to investigate the commencement of the day among the *Saxons* and *Britons* upon a different and more probable hypothesis. And this, indeed, is the main question in agitation.

Now it should seem that the *Saxons* reckoning by nights and not by days (whereby the nights evidently preceded the days), their day began at evening; hence our *se'nnight* and *fortnight*; and see *Tacitus* [*m*], *Du Fresne* [*n*], *Sir Thomas Brown* [*o*], *Verstegan* [*p*] and *Thoresby* [*q*].

As to the *Britons* still more antiently their practice may be collected with some degree of certainty from *Cæsar's* Commentaries [*r*], where it appears that the *Gauls* began their day at the same time as the *Saxons* did, viz. with the evening; and it is always allowable to argue from the customs of the *Gauls* to those of our Island-Britons, where it follows, that these last be-

[*k*] Johnson, Eccl. Laws A. 958, he observes, that three o'clock was called *high-noon*, and mid-day *noon*.

[*l*] Wright, Trav. p. 494.

[*m*] Tacitus de Mor. Germ.

[*n*] Du Fresne, v. Nox.

[*o*] In Sacheverell's Survey of *Man*, p. 173.

[*p*] Verstegan, p. 58.

[*q*] Thoresby, Duc. Leod. p. 84.

[*r*] Cæsar de B. Gall. VI. c. 16. Sir Thomas Brown, ubi sup. p. 172.

gan their day at the ſame time. But though this may ſeem to be ſufficiently concluſive, I ſhall nevertheleſs refer you, as a further ſupport of the argument to Mr. *Camden* [*s*], *Sheringham* [*t*], *Sammes* [*u*], *Wilkins* [*x*], *Richard's* Britiſh Dictionary [*y*], and the following inſertion in *Du Freſne*, concerning the *Armoricans*, 'Armorici *Seiſun* vel Seiſhun, i. e. *ſeptem* '*ſomni*, dicunt pro *ſeptimana*, et *henos* vel *henoas* pro *hodie*, quod 'proprie *hac nocte* ſignificat [*z*].' I ſhall only add for a concluſion, that this argument from night's preceding day both among the *Saxons* and *Britons* will appear very forcible to all thoſe who infer from the words of *Moſes* in the firſt chapter of *Geneſis*, as I think all do, that the *Hebrews* began their *nucthemeron* with the evening [*a*]. I am, Sir,

Your moſt obedient ſervant,

SAM. PEGGE.

[*s*] Camden, Brit. col. xix. 433, 434. [*t*] Sheringham, p. 107.
[*u*] Sammes, p. 115. 148. [*x*] Wilkins, Præf. ad Tanneri Bibl. p. 3.
[*y*] Richards, v. *Nos*, *Wythnos* and *Pythefnos*.
[*z*] Du Freſne, v. *Nox*. [*a*] Sir Thomas Brown, l. c. p. 173.

XXI. *Remarks on the* Sumatran *Languages, by Mr.* Marſden. *In a Letter to Sir* Joſeph Banks, *Bart. Preſident of the Royal Society.*

Read February 22, 1781.

SIR,

ENCOURAGED by the attention you paid to the ſubject when I had the honor of converſing with you on it, I take the liberty of preſenting you with two comparative ſpecimens of the languages ſpoken in Sumatra and other parts of the eaſt. The one exhibits ſimply a liſt of fifty words; of univerſal uſe from the nature of the ideas they expreſs; as ſpoken in twelve different countries or diſtricts. The other exhibits a view of thoſe words in the Sumatran and neighbouring languages, which are obſerved to correſpond in ſound and ſignification, with words in the languages of places ſituated at a diſtance from thence.

MY chief deſign in theſe collections, was to trace, if poſſible, a common origin. My ſecondary object, to determine whether the various independent and unconnected nations who inhabit the internal parts of Sumatra, ſpeak languages radically and eſſentially different, as is generally ſuppoſed by the Europeans reſident there, or only different dialects of the ſame.

IN regard to the firſt I muſt confeſs that I have been but little ſucceſsful, perhaps from want of ſufficient opportunity of

Diſtricts.

English	Malay	Macaſſar	Savu	Otaheite	Chineſe
One	Satoo	Saydee	Uſſe	Atahay	Cheea
Two	Duo	Dooa	Rooe	Erooa	No
Three	Teego	Tulloo	Tulloo	Torhoo	Sanh
Four	Ampat	Pa-me	Uppa	Attaa	See
Five	Lumo	Leema	Lumee	Ereema	Go
Six	Anam	Anan	Unna	Aono	Lacq
Seven	Toojoo	Peetoo	Petoo	Aheetoo	Shit
Eight	Slappan	Arrooa	Aroo	Awarroo	Peeh
Nine	Sambilan	Aſſarra	Saio	Aeeva	Caow
Ten	Sapooloo	Sapooloo	Singooroo	Ahooroo	Chap
An hundred	Sa-ratoos	Sangatoos			Chepé
Huſband	Lackee	Baronee		Tane	Ang
Wife	Beenee	Makoonraye		Huaheine	Poh
Father	Bapa	Ambo		Medooa tane	Enteeah
Mother	Mau	Endo		Med. waheine	Neha
Brother	Sadarroo	Sadjee		Teine	Suotee
Head	Capallo	Ooloo		Oopo	Toucah
Eyes	Matto	Mattaye	Madda	Matau	Buxu
Noſe	Eedong	Eengana	Sivanga	Eahoo	Peeh
Hair	Ramboot	Gummanna	Row	Eraowroo	Toumo
Cheeks	Peepee	Dowcheelee	Cavaranga	Paparea	Sheepay
Belly	Proot	Allay	Dàlloo	Eoboo	Pueto
Hand	Tangan	Tapha-lamay	Wàlalea	Ereema	Tehoo
Legs	Cakee	Aajiengna	Baibo	Awy	Cahcoot
Garment	Badjoo	Cabadja	Cova	Aihoo	Sanh
Day	Aree	Aſſo		Mahana	Ieet
Night	Mallam	Bunnee-ee		Eaoo	May
White	Pootee	Pootee		Tea	Pay
Black	Etam	Lotong	Bulla	Ere ere	Oh
Good	Baye	Macleching		Myty	Hoh
Die	Mattee	Mattee		Matte	See
Fire	Appee	Appee		Wahaa	Whoey
Water	Ayer	Ooaye		Avy	Choee
Earth	Tana	Bunnoo		Fenooa	Toh
People	Orang	Taow	Momonne	Tata	Lang
Coconut	Clappo	Calookoo		Taro - Aree	Eea
Teeth	Geegee	Aſſunna		Eneehees	Cheekee
Hog	Babee	Babee	Vavee	Booah	Tee
Bird	Boorong	Manoomanoo	Dolula	Manoo	Cheow
Egg	Telloor	Tello	Dulloo	Aouero	Nooey
Fiſh	Eecun	Iooco-edja	Nudoo	Eya	Hee
Rice	Bray	Bra	Arree		Bee
Potatoes	Oobee	Oobee		Oomarrah	Whunchee
Sun	Matto Are	Matangaſſo		Mahana	Jettaou
Moon	Boolan	Oolang	Wurroo	Marama	Gooay
Stars	Beentang			Efaitoo	Schay
I	Ambo, Sa	Eedee		Waow, Mee	Gooa
Yes	Eeo	Eeay-na	O	Ai	Hoh
Come hither	Maree ſeen	Sakomaye		Harre mai	Layeno
God	Allah talla	Allah tallah		Eatua	Teehn tay

Lift of words of univerfal ufe as fpoken in twel

English	Malay	Acheen	Batta	Lampoon	Neeas	Rejang	Javan
One	Satoo	Sah	Sadah	Sye	Semboos	Do	Seejee
Two	Duo	Dua	Duo	Rowah	Demboos	Dooy	Roro
Three	Teego	Tloo	Toloo	Tulloo	Tuloo	Tellou	Tulloo
Four	Ampat	Paat	Opat	Ampah	Oopha	'Mpat	Papat
Five	Lumo	Lumung	Leemah	Leemah	Leema	Lemo	Leemo
Six	Anam	'Nam	Onam	Annam	Oonoo	Noom	Nanam
Seven	Toojoo	Toojoo	Paitoo	Peetoo	Pheetoo	Toojoos	Peetoo
Eight	Slappan	D'lappan	Ooalloo	Ooalloo	Ooalloo	Delapoon	Oloo
Nine	Sambilan	Sakoorang	Sceah	Seewah	Seewa	Sembilan	Sanga
Ten	Sapooloo	Saploo	Sapooloo	Pooloo	Phooloo	Depooloo	Sapooloo
An hundred	Sa-ratoos	Sa-ratoos	Saratoos	Saratoos	Oghoo	Sotofe	Satoos
Hufband	Lackee	Lackaye	Morah	Cadjoon	Dongagoo	Sacky	Lanang
Wife	Beenee	Beenaye	Aboo	Cadjoon	Seealavee	Sooma	Ooadone
Father	Bapa	Bah	Ammah	Bapa	Amah	Bapa	Paman
Mother	Mau	Mau	Enang	Eenah	Eenah	Indo	Beeang
Brother	Sadarroo	Addooeh	Ahhah	Adding	Talleephoofoon	Cacoon	Sadooloor
Head	Capallo	Oolou	Ooloo	Oolooh	Hugu	Oolou	Endafs
Eyes	Matto	Matta	Mahtah	Mattah	Huru	Matty	Matta
Nofe	Eedong	Eedoon	Aygong	Eerong	Eeghoo	Eeoong	Eerong
Hair	Ramboot	Oh	Oboo	Booho	Boo	Boo	Ramboot
Cheeks	Peepee	Meung	Oroom	Bechum	Bo-oogh	Cubbole	Peepee
Belly	Proot	Proot	Buttoohah	Tunnaye	Talloo	Tennuay	Oouattun
Hand	Tangan	Iarrooay	Tangan	Chooloo	Tanga	Tangoon	Lungan
Legs	Cakee	Buttees	Paat	Binto	Apeh	Bettees	Seekeel
Garment	Badjoo	Badjow	Ahbee	Caway	Baroo	Badjow	Calambee
Day	Aree	Ooraye	Torang harree	Rannee	Loo-oh	Beely looeng	Deena
Night	Mallam	Mallam	Borgning	Beenghee	Boong-ee	B. calemmoon	Oongee
White	Pootee	Pootee	Nabottar	Mandack	Aphoofee	Pootea	Pootee
Black	Etam	Hetam	Nabcerong	Malloom	Aytoo	Meloo	Eerung
Good	Baye	Gaet	Dengan	Buttie	Sooghee	Baye	Saye
Die	Mattee	Mattay	Mahtay	Jahal	Maté	Mattooee	Mattee
Fire	Appee	Appooy	Ahhee	Aphooy	Aleetoo	Opoay	Geennee
Water	Ayer	Eer	Ayck	Wye	Eedano	Beole	Banneeo
Earth	Tana	Tano	Tana	Tanno	Tano	Peeta	Lumma
People	Orang	Oreeoong	Halla	Ooloon	Neegha	Toon	Wong
Coconut	Clappo	Oo	Crambee	Clappah	Bunneeo	Neole	Clappo
Teeth	Geegee	Geguy	Ningee	Eeflan	Eephoo	Aypen	Oontoo
Hog	Babee	Booy	Babee	Babooye	Bavee	Sooeetemba	Cheling
Bird	Boorong	Cheechim	Peedong,Manook	Boorong	Foopho	Benono	Mano
Egg	Telloor	Boh	Peerah	Tullooy	Adoolo	Tennole	Endo
Fish	Eecun	Incoor	Dekkay	Ewah	Eeagh	'Conn	Eewa
Rice	Bray	Breeagh	Dahans	Beeas	Booragh	Blas	Bras
Potatoes	Oobee	Gadoong	Gadong	Cutillah	Governee	Ooby	Cufiela
Sun	Matto Aree	Mattowraye	Matah haree	Matta rance	Seeno	Mattu beely	Surningee
Moon	Boolau	Booloon	Boolan	Boolan	Bowa	Booloon	Oolan
Stars	Beentang	Beentang	Bintang	Bintang	Doophee	Beetang	Ooeentan
I	Ambo, Sayo	Ooloon	Apoo	'Gnah	Eeow	Ookoo	Coula
Yes	Eeo	Nyoh	Olo	Eea	Eh	Aou	Inghee
Come hither	Maree feenee	Jah knnyi	Maré tofone	Eja dejah	Einee undeh	Comeendi	Mareenee
God	Allah tallah	Allah	Daibattah	Alla Talla	Lowa langee	Oola tallo	Dewah

velve different countries or diſtricts.

Java	Malagah	Mongeraye	Maceſſar	Savu	Otaheite	Chineſe
	Eraike	Eelakoo	Saydee	Uſſe	Atahay	Cheeu
	Dooe	Lolaye	Dooa	Rooe	Erooa	No
	Teloo	Loolectoo	Tulloo	Tulloo	Torhoo	Sanh
	Ephat	Lopah	Pa-me	Uppa	Attaa	See
	Leemoo	Leemo	Leema	Lumee	Ereema	Go
	Enena	Daho	Anan	Unna	Aono	Lacq
	Pheetoo	Pheetoo	Peetoo	Petoo	Aheetoo	Shit
	Valoo	Apho	Arrooa	Aroo	Awarroo	Peeh
	Seevee	Seewa	Aſſarra	Saio	Aeeva	Caow
o	Phooloo	Tooroo	Sapooloo	Singooroo	Ahooroo	Chap
	Tatoo		Sangatoos			Chepé
	Laké laké	Namee	Barones		Tane	Ang
e	Ampela	Jah	Makoonraye		Huaheine	Poh
	Appa	Bapa	Ambo		Medooa tane	Enteeah
	Neray	Mau	Endo		Med. waheine	Neha
or	Ranowla	Noko	Sadjee		Teine	Suotee
	Loohah	Jahé	Ooloo		Oopo	Toucah
	Meſſoo	Nana	Mattaye	Madda	Matau	Buuu
	Oorong	Meenee	Eengana	Sivanga	Eahoo	Peeh
ot	Vooloo	Jahé	Gummanna	Row	Eraowroo	Toumo
	Takoolaka		Dowcheelee	Cavaranga	Paparea	Sheepay
ung	Keeboo	Ataliba	Allay	Dàlloo	Eoboo	Pueto
	Feletanan	Tanaraga	Tapha-lamay	Wùlalea	Ereema	Tehoo
	Toongoota	Eetee	Aajiengna	Baibo	Awy	Cahcoot
ee	Ahanzoo	Moortana	Cabadja	Cova	Aihoo	Sanh
	Hareeanroo	Oofa	Aſſo		Mahana	Ieet
	Haree Vah	Gamoo	Bunnee-ee		Eaoo	May
	Phootee	Bootee	Pootee		Tea	Pay
	Minetee	Metam	Lotong	Bulla	Ere ere	Oh
	Sooah	Row	Macleching		Myty	Hoh
	Mattee	Hoomoo	Mattee		Matte	See
e	Aphoo	Atta	Appee		Wahaa	Whoey
o	Rano	Eera	Ooaye		Avy	Choee
	Tana	Tano	Bunnoo		Fenooa	Toh
	Ooloo	Anoonoo	Taow	Momonne	Tata	Lang
	No Word	Ooata	Calookoo		Taro - Aree	Eea
	Neephee	Oaſſee	Aſſunna		Eneehees	Cheekee
g	Lamboo	Baye	Babee	Vavee	Booah	Tee
	Voorong	Olo	Manoomanoo	Dolula	Manoo	Cheow
	Atoodee	Aſſowa	Tello	Dulloo	Aouero	Nooey
	Pheeah	Appee	Iooco-edja	Nudoo	Eya	Hee
	Varay	Reia	Bra	Arree		Bee
	Oovee	Jammais	Oobee		Oomarrah	Whunchee
ee	Maſſoo anroo	Ooatoo	Matangaſſo		Mahana	Jettaou
	Voolan	Ooroo	Oolang	Wurroo	Marama	Gooay
ng	Vintan	Eepee berray			Efaitoo	Schay
	Zaho	Anee	Eedee		Waow, Mee	Gooa
	No word	Eeo	Eeay-na	O	Ai	Hoh
ee	Aveeah	Maoo	Sakomaye		Harre mai	Layeno
	Dernakaree		Allah tallah		Eatua	Teehn tay

Examples of words in the Sumatran and Neighbouring Languages correſponding in ſound

Malay Achenese Batta Neas Rejang Javaneſe	Mattee Mattay Mahtay Mate Mattooee Mattee	Die, Dead	Otaheite Garageeco Madagaſcar Bugguefs or Macaſſar	Matte Mattee Mattee Mattee	Malay Achenese Batta Neas Rejang Lampoon Javaneſe	
Malay Achen. Batta Rejang Lampoon Javan.	Matto Matta Mahtah Matty Mattah Matta	Eyes	Otaheite Savu Garageeco Bugguefs Eaſter iſland Marqueſas Amſterdam N. Zealand Malicolo	Matta Madda Matta Mattaye Matta Matta Matta Matta Maitang	Malay Achen. Batta Neas Rejang Lampoon Javan.	
Malay Achen. Batta Neas	Babbee Booy Babee Bavee	Hog	Otaheite Marqueſas Amſterdam Savu Mongeraije Malicolo Tanna	Boon Boon Booacha Vavee Baye Brooas Boogas	Malay Achen. Batta Neeas Rejang Lampoon	
Batta Lampoon Javan.	Manook Manoo Mano	Bird, Fowl	Otaheite Eaſter Iſland Amſterdam Tanna N. Caladonia Bugguefs	Manoo Manoo Manoo Manoo Maneek Manoo manoo	Malays Achen. Batta Neas	
Rejang Neas	Neole Bunneeo	Coconut	Amſterdam Chineſe N. Caladonia	Eeoo Eea Neeo	Malay Batta Neas	
Malay Neas Rejang Javaneſe	Eecun Eeagh Eewah Eewah	Fiſh	Otaheite Eaſter Iſland N. Zealand Amſterdam Madagaſcar	Eya Eeka Eeka Eeka Pheeah	Neas Lampoon Malay Malay	
Malay Achen. Batta Lampoon	Ayer Eer Ayck Wye	Water	Bugguefs Mongeraye Otaheite Eaſter Iſland N. Caladonia	Ooaye Eera Avy Eey Ooee	Malay Javan.	
Malay Neas Rejang	Oobee Gooee Ooby	Potatoes and Yams	Otaheite Eaſter Iſland Amſterdam N. Caladonia Madagaſcar	Eoohe Oohe Oobe Oovee	Malay Malay Neas	
Malay Lampoon Javan.	Orang Ooolon Wong	Man Perſon People	Chineſe Madagaſcar	Lang Ooloo	Malay Achen. Neas Rejang Lampoon Javan.	
Achen. Lampoon	Appooy Aphooy	Fire	Madagaſcar Chineſe	Aphoo Whooee	Malay	

and signification with others in places remote from thence.

Duo	Two	Otaheite	Eroos
Dua		Savu	Rooe
Duo		Madagascar	Dooce
Demboos		Bugguess	Doos
Dooy		Easter Island	Roos
Rowah		Marquesas	Aoos
Roro		Amsterdam	Eoos
		Tana	
Teego	Three	Otaheite	Torhoo
Tloo		Savu	Tulloo
Toloo		Madagascar	Telloo
Taloo		Bugguess	Tulloo
Telou		Easter Island	Toroo
Tulloo		Marquesas	Atoroo
Tulloo		Amsterdam	Toroo
Ampat	Four	Otaheite	Atta
Paat		Savu	Uppa
Opat		Madagascar	Ephat
Oopha		Easter Island	Faa
Mpat		Marquesas	Afaa
Ampah		Malicolo	Ebat
Toojoo	Seven	Otaheite	Aheetoo
Toojoo		Savu	Peetoo
Pailoo		Madagascar	Pheetoo
Pheetoo		Mongeray	Pheetoo
		Marquesah	Acheetoo
Sambilan	Nine	Otaheite	Aeeva
Seeah		Savu	Saio
Sewah		Madagascar	Seeveo
		Easter Island	Heeva
Adooloo	Egg	Savu	Dulloo
Tulloy		Bugguess	Tello
Papateel	A Tool	N. Zealand	Patoo patoo
Telingo	Ear	Malicolo	Talingan
Tapa	Sole of Foot	Otaheite	Tapooy
Eerung	Black	Otaheite	Ere ere
Momotong	Cut	Otaheite	Motoo
Paya	Fatigued	Otaheite	Paya Faeea
Talloo	Belly	Savu	Dulloo
Bray	Rice	Savu	Arre
Breeagh		Madagascar	Varay
Booragh		Bugguess	Bra
Blas		Chinese	Bee
Beeas			
Bras			
Bapa	Father	Otaheite	Papa

acquaintance with the continental tongues. I am desirous however of contributing a few grains to the mass of literature; leaving to others whom chance or curiosity may lead into the same road to add to and work up the materials. It may possibly then be found that Tartary, that great *officina gentium*, has supplied the south eastern archipelago with inhabitants. A knowledge of the original Siamese, Laos, Cambodian and Peguan languages, as these nations lie in the intermediate space, would present the readiest clue to a discovery of that kind. But here I am in the dark. My information leads but a small way, and can only boast the merit of genuineness, being taken from the mouths of the natives themselves (except in the instances of Savu and Otaheite) and not from books. The only general inference we can draw on this head, is, that from Madagascar eastward to the Marquesas, or nearly from the east coast of Africa to the west coast of America, there is a manifest connexion in many of the words by which the inhabitants of the islands express their simple ideas, and between some of the most distant, a striking affinity. The links of the latitudinal chain remain yet to be traced.

WITH respect to the resemblance of the Sumatran tongues among themselves, I imagine most will deem it such as to pronounce them dialects only; and on this, Sir, I shall be happy to hear your opinion and those of your ingenious friends; for I am far from thinking the general resemblance so decided as to put the point beyond dispute. The circumstance of an alphabet character peculiar to each would seem to prove that their origins were unconnected, and that the likeness has been produced by the incorporation of words borrowed from each other. It is certain that they conceive thus of themselves; that they do not in the least comprehend each other's discourse; that their persons are different, and that their manners and customs are in

many the moſt ſtriking particulars as unlike as thoſe of the moſt diſtant nations. But on the other hand it will be argued that the reſembling or common words are radical and ſuch whoſe correſpondent ideas muſt have exiſted and been deſcribed prior to all intercourſe with either remote or neighbouring people; as will appear from an inſpection of the comparative ſpecimens, and conſequently that the diſſimilarity, not the ſimilarity, muſt have been induced by degrees. If we admit this laſt ſuppoſition and obſerve that in the written character, particularly of the Batta and Rejang languages, there is not the moſt diſtant relation either of form or order, it will follow that this art of repreſenting our thoughts by viſible ſigns took its riſe among theſe people after the period of their ſeparation; that it muſt have been with reſpect to each of them entirely original, and that it was rather a work of premeditation, in ſome meaſure perfected by the firſt deſigner, than the half begotten offſpring of chance, licked into ſhape by the ſlow efforts of time and uſe. Indeed the Rejang writing is ſo ſimple, uniform, and perſpicuous, both in regard to the form of the characters and diſpoſition of the ſyllables, that from this evidence alone I ſhould not heſitate to pronounce it the deſign and execution of one head and hand. This hypotheſis claſhes with the opinion generally received of the formation and progreſs of written language, whoſe ſteps have been ſuppoſed vague and indeterminate. There are here no traces of the hieroglyphic figures which ſome have aſſerted to be the parents of letters, producing them by a gradual corruption: an idea which the complex, and ſeemingly fanciful, Chineſe character gives ſtrong ſupport to. But nature in the contour of her productions, of which the hieroglyphics were imitations, employs only curve lines, whereas the letters of the Rejang alphabet are entirely compoſed of angles, for the moſt part acute, variouſly combined. The latter might dege-

nerate into the former, but to admit the reverſe were abſurd. There needs only inſpection to be ſatisfied that thoſe letters are now, I mean with reſpect to their general form, what they were from the beginning.

FOR tracing the connexion of the words in the accompanying ſpecimens, it is neceſſary to remark, that there are ſeveral letters or ſimple ſounds, which, though to our organs they ſeem diſtinct, are often confounded and tranſpoſed in rude languages. Theſe are probably ſuch as are produced by conformations of the mouth nearly ſimilar, and a difference in ſuch ſounds, on a compariſon of words, is not to be eſteemed eſſential, though it may occaſion a conſiderable alteration, if two or more happen to concur in the ſame. The change is ſtill greater when a ſecond corruption of the ſame letter takes place, on a word's paſſing into a third language; though to a perſon tolerably verſed in them there is not a doubt of the derivation and analogy. For example, *Eedong*, in Malays, becomes *Eerong* in Javaneſe and *Oorong* in the Madagaſcar language: and *Duo* in Malays, is in Otaheitian *Rooa*, in Savuan *Rooe* and in Mongeraye *Loolaye*. The letters uſually confounded are L and R, P and F, D and T, D and R, B and V, Oo and R; beſides many others in which the articulation is leſs marked.

I SHALL only further obſerve, that though the very wide extended correſpondence of the words denoting numbers be a ſtriking circumſtance to an inveſtigator of theſe ſubjects, it cannot I doubt be admitted as any preſumptive proof of a common origin of the nations making uſe of them. In ſome iſlands, as thoſe of Eaſter and Otaheite, theſe terms are found to reſemble, though no others in the two tongues have the ſmalleſt affinity. Counting, however ſimple a buſineſs it may appear to us, who are uſed to ſuch powerful combinations of numbers, is matter of ſcience, and has moſt probably been adopted

adopted as an improvement by one nation from another. Men may exist long together without finding it absolutely necessary to express these ideas, and in the mean time the improvement of navigation or a fortuitous occurrence of events may convey to them the lights of their more civilized neighbours.

I SHOULD apologize for troubling you with my crude opinions on a subject which you are capable of digesting in a much more satisfactory manner; but I am willing to prove myself by the goodness of my intention not altogether unworthy the notice of the President of the first literary society in the world.

I am, Sir,

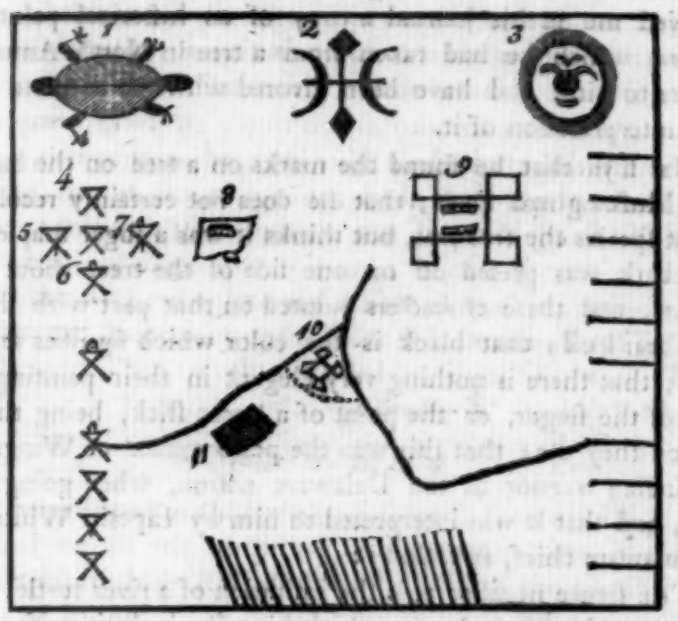
with much respect,

your most obedient humble servant,

March 5, 1780.

WILLIAM MARSDEN.

XXII. *Observations*



XXII. *Obſervations on the* Indian *method of Picture-Writing by* William Bray, *Eſq. In a Letter to the Secretary.*

Read March 1, 1781.

SIR,

IN a memoir lately communicated to the Society by governor Pownall on the origin and nature of picture and elementary writing he obſerves that he has heard of painting on trees by the Indians in North America, but that he never ſaw any of them.

RECOLLECTING

Recollecting that a gentleman of my acquaintance had ſhewed me in his journal a copy of an hiſtorical painting in figures which he had taken from a tree in North America, I wrote to him, and have been favored with the annexed ſketch and interpretation of it.

He ſays that he found the marks on a tree on the banks of the Muſkingham river; that he does not certainly recollect of what ſpecies the tree was, but thinks it was a ſugar maple; that the bark was peeled off on one ſide of the tree, about a foot ſquare, and theſe characters painted on that part with charcoal and bear's oil; that black is the color which ſignifies anger or war; that there is nothing very elegant in their paintings, the end of the finger, or the point of a burnt ſtick, being the only pencil they uſe; that this was the performance of Wingenund, an Indian warrior of the Delaware nation, when going out to war, and that it was interpreted to him by captain White-eyes, a Delaware chief, as follows:

The figure number 1. is the imitation of a river turtle, which is the emblem or badge by which his tribe is diſtinguiſhed.

N° 2. is his perſonal mark or character. The Indians chooſe ſome one in their youth, and retain it without alteration to their death.

N° 3. is meant for the ſun.

The ten horizontal ſtrokes under it ſhew the number of times he had been at war, that is, the number of expeditions he had been upon. They do not reckon by campaigns like the Europeans.

The figures under the turtle ſhew the number of ſcalps and priſoners he had taken at different times, of which thoſe marked N° 4. are men's ſcalps.

N° 5. women's ſcalps.

N° 6. men priſoners.

N° 7. women priſoners.

The

THE number of ſcalps or priſoners taken in each expedition are ſet oppoſite to it, viz. The firſt time he went to war he was unſucceſsful, taking none; the ſecond time he took one man's ſcalp; the third time he took a woman's ſcalp, a man's ſcalp, and a woman priſoner.

THE figure under the turtle, N° 8. is intended for a fort which he was at the taking of; he believes it was one of the ſmall forts on lake Erie which was ſurpriſed by the Indians about 1762.

THE fort N° 9. is intended for Fort Detroit, which was beſieged by the Indians in 1762 under the command of the famous Pontiack, but bravely defended by major Gladwin. The other, N° 10. is Fort Pitt, with the town, N° 11. and the Moningalialy and Alligany rivers; which was beſieged by the Indians about the ſame time.

THE ſpace between the ſixth and ſeventh horizontal ſtrokes, ſhews that he did not go to war for ſome time.

THE twenty-three ſtrokes at bottom ſhew the number of warriors he had with him at the time he made the war-marks; their inclining to the left, with their backs to the ſun, ſhews that they were going to the northward.

HE ſays that the marks they make on their return are generally done with vermillion, which is a peaceable color, and ſhews that their anger is no more. At thoſe times they put the ſcalps and priſoners in the rear of their men, in this manner \\\\\ x̄ x̄, and if they had been out two moons and an half they would put two round black or red ſpots on the right of the priſoners, and a ſemicircular one for half a moon. Their loſs they would expreſs by making horizontal ſtrokes between the priſoners and the moons in this manner \ \\\ x̄ x̄ ≡ ●● ☾

THE Delawares are divided into three tribes, the turtle, the wolf and the eagle tribes. Each makes uſe of their reſpective

badge, and it would be looked upon as an unpardonable crime for one tribe to forge or make uſe of the badge of another. Every nation differs ſomething in the manner of deſcribing their war-atchievements.

IF the above will be worthy the attention of the Society, I beg you to lay it before them, and am, Sir,

Your moſt obedient

humble ſervant,

WILLIAM BRAY.

XXIII. *Obſervations*

XXIII. *Obſervations on the Origin and Antiquity of* Round Churches; *and of the* Round Church *at* Cambridge *in particular. By Mr.* James Eſſex, F. A. S.

Read May 24, 1781.

THOUGH there are but few churches in England built on a circular plan, it has generally been ſuppoſed that moſt of them were built by the Jews for Synagogues; and this opinion has long prevailed at Cambridge, becauſe the round church, a plan of which is herewith annexed, is ſituate in a part of the town commonly called the Jewry, in which place it is generally believed that the Jews lived together, as they formerly did in that part of London called the Old Jewry; but as it does not appear from any good authority that the Jews ever occupied this particular part of the town, we muſt ſeek ſome better reaſon for its being called the Jewry. As the Jews were diſperſed into various parts of the world ſoon after the deſtruction of Jeruſalem by Titus, it is probable that ſome of them found the way into Britain while it was ſubject to the Romans, though we have no certain account of their appearing here under that denomination before the time of William the Conqueror, who gave them great encouragement. He firſt permitted them to ſettle in London, and dwell together in that part of the

city called the Old Jewry; but increasing under the protection of that prince and of his son William Rufus, they were permitted to settle in other parts of the kingdom, and soon chose for their residence the principal trading towns, such as York, Lincoln, Norwich, Northampton, Cambridge, and others. In some of these towns they built Synagogues, and carried on the business of bankers by letting out their money upon interest to merchants and others concerned in trade. They are supposed to have settled in Cambridge in the time of Henry the First [a], it being at that time a large town well situated for carrying on a considerable in-land traffick with the counties of Huntingdon, Bedford, Norfolk, Suffolk, and other places, by means of the rivers Grant and Ouse, which at that time were navigable for vessels of considerable burthen to several wharfs on the west side of the town. Thus Cambridge from the natural advantage of its situation became a trading town, to which king Henry the First added several valuable privileges for encouraging it. He granted the fee farm of the town (then in his own hands) to the burgesses of Cambridge, to be held of him in chief, they paying into his exchequer the same farm which the sheriff used to pay: to this charter he added another in which he ordered that no vessel should unlade, or pay toll for its goods at any wharf in Cambridgeshire, but in Cambridge. These privileges would naturally extend the commerce of the town, and encourage strangers to settle there. Though the Jews at that time were esteemed no better than usurers, they were considered as a necessary people, and useful to merchants as bankers, in those places where commerce was improving; for which reason, they were placed under the particular jurisdiction of one principal officer appointed by the king, called the *justicer* of the Jews, whose business it was to protect them in their just rights, and

[a] Fuller's History of Cambridge.

decide all ſuits betwixt the Chriſtians and them. At this time therefore it is probable they were permitted to ſettle in Cambridge, where they were allowed to purchaſe a piece of ground, on which they built themſelves a Synagogue, and houſes to dwell in, where they lived together as in London and other places upwards of a hundred years. But after the death of king John they met with little encouragement in England. Henry the Third was a covetous prince, and the Jews were grown rich; their wealth excited the envy of many, and pretences were eaſily found to ſtrip them of it. The king, more covetous than juſt, no longer protected them; by the laity they were accuſed of crimes againſt the ſtate, by the clergy of crimes againſt religion. The firſt charged them with forgery, clipping, coining, and uſury; the latter, of enchantment, and crucifying the children of Chriſtians in contempt of the Chriſtian religion [*b*]. Theſe crimes, whether true or falſe, were ſufficient to excite a general clamour againſt that unhappy people, and afforded the king a fair opportunity of ſeizing their wealth, and his ſucceſſor an excuſe for expelling them from his kingdom, when they had nothing left to ſeize.

WHETHER any particular crimes were laid to the charge of the Jews reſiding in Cambridge does not appear; but we find king Henry in the year 1224 ſeized their effects and confiſcated their eſtates. He ſold the houſe of one Benjamin, near the Guildhall, to the corporation for a common priſon [*c*], and in their Synagogue which ſtood near it was placed a cell of mendicant friars [*d*], which his ſucceſſor Edward the Firſt removed

[*b*] Mat. Paris Hiſt. p. 644.

[*c*] Primo receperunt Cantabrigiae fratres villae burgenſes, aſſignantes eis veterem ſynagogam, quae erat contigua carceri. (Leland's Collec. vol. III. p. 342.) Anno Reg. 8 Hen. III. 15 October. (MS. Baker, vol. XXV. p. 8.) for forty marks, and a rent of one mark yearly to the crown, and two ſhillings to the chief lord of that houſe.

[*d*] Tanner's Notitia Monaſtica.

to

to the place where Sidney Suſſex college now ſtands. Some remains of their old houſe may yet be ſeen in the corner houſe leading to the Guildhall.

After this time the Jews could have no ſettled habitation in Cambridge [*e*], and while they had it is evident from what has been ſaid, they did not all live in that part of the town called the Jewry; for their Synagogue and ſome houſes adjoining were ſituate near the Guildhall, a ſituation more convenient for their buſineſs, being in the centre of the town, in the market place between the principal places of traffic for corn and other merchandize; where it is probable they were permitted to build before the year 1200, when king John founded the corporation, and granted them a merchants guild.

It has long been a common opinion, that the Synagogues of the Jews were anciently built in a circular form [*f*]; but whence this notion aroſe I cannot certainly ſay. Their temple at Jeruſalem was not of that form, neither was the tabernacle of Moſes, nor do we find the modern Jews affect that figure in building their Synagogues. It has however been generally ſuppoſed that the round church in Cambridge, that at Northampton, and ſome others, were built for Synagogues, by the Jews while they were permitted to dwell in thoſe places; but, as no probable reaſon can be aſſigned for this ſuppoſition, and I think it is very certain that the Jews who were ſettled in Cambridge, had their Synagogue and probably dwelled together in a part of the town never called the Jewry, ſo we may reaſonably conclude, the round churches we find in other parts of this kingdom, were not built by the Jews for Synagogues, whatever the places may be called in which they ſtand.

[*e*] Henry III. granted them annual protections while they continued here.

[*f*] Fuller's Hiſt. Camb. p. 4. Parker, p. 126.

When the Christian religion was perfectly eſtabliſhed in the Roman empire, the Pagan temples were very numerous in Rome, and ſeveral of them were converted into Chriſtian churches; but the greateſt part of them being too ſmall for that purpoſe, were demoliſhed, and the materials applied in erecting thoſe churches which Conſtantine cauſed to be built at that time.

The temples built by the Greeks and ancient Romans varied little from their original form, though they differed in magnitude and ornaments; and it was not till the Roman empire began to decline, that they introduced that variety of forms which we find in many of their plans. Among the temples built in the latter ages of the empire, ſome were *circular*, and being very large and convenient, were given to the Chriſtians to be converted into churches. Among thoſe, the temple of Faunus built by the emperor Claudius, being the largeſt of its kind, was dedicated to God by pope Simplicius I. about the year 470, by the name of St. Stephen [*g*]: but the Pantheon, the moſt beautiful circular temple in Rome, was not repaired until the year 607, when it was dedicated to the Bleſſed Virgin by pope Boniface IV. and three years after, to all the ſaints by Gregory IV [*h*].

The churches built at Rome in the fourth century were of various forms; but in the largeſt they generally imitated the Baſilicae. Such were the Lateran, the Vatican, and ſeveral others: but they built ſome in a *circular* form. Among thoſe was the church of St. Agnes without the *porta Viminalis*, which ſome ſuppoſe was built for a temple of Bacchus, but others with more probability attribute it to the emperor Conſtantine.

[*g*] Antoine Deſgodetz, Edifices antiques de Rome. Il eſt à preſent appellé Saint Etienne *le rond*.

[*h*] Deſgodetz.

Helena

Helena the mother of Conſtantine being as zealous in promoting the Chriſtian religion as her ſon, viſited Jeruſalem, where by his aſſiſtance ſhe built ſeveral magnificent churches, in ſuch places as were ſignalized by the moſt remarkable events relating to the life and ſufferings of our Saviour and his apoſtles, ſome of which ſtill remain to commemorate thoſe events, and perpetuate the piety and munificence of that princeſs. Among the churches which they built in the Holy Land few we may ſuppoſe are now ſtanding; though ſome may have been rebuilt upon the original foundations, and others may yet retain ſome remains of the ancient ſuperſtructures. Bede [*i*], ſpeaking of the church of the reſurrection or holy ſepulchre at Jeruſalem, deſcribes it as being a large round church, which differs very much from the preſent building according to the plan of it publiſhed by P. Barnardino about the year 1619; but this difference will be accounted for, when we conſider that the church built by Conſtantine was ſtanding when Bede wrote, but had undergone many changes before P. Barnardino made a plan of that which is now there. The church deſcribed by Bede had two rows of pillars, which formed two circular porticos within the walls, ſomewhat like the temple of Faunus at Rome, though not ſo large; but the preſent building has only one portico round about, and one circular row of pillars. I imagine the outer walls of the preſent church are the ſame which Conſtantine built, but that the pillars of the portico, ſtand upon the ſame foundations on which the outer row of pillars in that church ſtood, though they are placed cloſer than they were in the firſt plan, becauſe the inner row being taken away to enlarge the area about the Holy Sepulchre, they muſt have a greater weight to ſupport.

[*i*] Reſurrectionis Dominicae rotunda eccleſia tribus cincta parietibus, duodecim columnis ſuſtentatur. (De Locis Sanctis cap. 2.)

The

THE empreſs *Helena* built a church on Mount *Olivet*, in memory of our Lord's Aſcenſion. *Bede* [*k*], in his deſcription of this church, calls it a large *round* church, with vaulted porticos; but the church which was ſtanding in *P. Barnardino's* time, was a ſmall octangular building on the outſide, but circular within, without pillars, or porticos, and conſequently cannot be the ſame which was there in *Bede's* time, though it may be built upon part of the foundations of *Helena's* church, and the pillars which are now at the external angles, with the eight arches, may be the remains of the vaulted portico mentioned by *Bede*, which being deſtroyed by time, or by the Barbarians while Jeruſalem was in their poſſeſſion, was never rebuilt, but when it was repaired, they contracted it to the preſent dimenſions, by pulling down the outer walls, and building new walls within the pillars and arches which formed the portico of the old church.

JERUSALEM being taken by the Saracens in the year of our Lord 637, the repairs of theſe churches were of courſe neglected, until the year 813, when *Charlemagne*, by the permiſſion of the calife *Aaron*, rebuilt the church of the Holy Sepulchre, under the inſpection of *Thomas*, Patriarch of Jeruſalem, who probably contrived the preſent plan, and enlarged it, to include ſeveral adjoining buildings. The Eaſt end I take to be of his building, containing the ſemicircular tribune; but the intermediate part between it and the ſepulchre is more modern, and might be rebuilt when the church was reſtored in the year 1049, after it was defaced by the Saracens towards the end of the tenth century.

CHARLEMAGNE, who was a great promoter of religion, and encourager of learning, ſoon after he became emperor of the Weſt, choſe *Aix le Chapelle* for the place of his uſual reſidence, and

[*k*] Eccleſia rotunda grandis, ternas per circuitum cameratas habet porticus deſuper tectas. De Locis Sanctis, Cap. VI.

built there a magnificent church, which was dedicated to the Holy Virgin by pope Leo the Third, in the year 804, in the presence of the emperor, and 365 archbishops and bishops. This church was built on a *circular* plan; it was supported by columns of marble and porphyry, which were brought from Rome and Ravenna; the gates were of brass, and many of the ornaments within were of gold and silver. This edifice was destroyed about 27 years after it was built, by *Godfrey* and *Sigisfrid*, dukes of Normandy, who ravaged the country, desolated the city, and destroyed the imperial palace and church. The city and church were rebuilt by the emperor *Otho* the Third, who was crowned there in the year 983. Though the present church has some part of it of a circular form, it is not probable that any part of Charlemagne's church remains, though great part of that built by Otho may, and as it is circular, it may be built upon the old foundations. The church of St. Sophia at Constantinople was first built by Constantine, which, being covered with a hemispherical dome, is by Bede [l] called a Round church, though it is not of that form within. Historians mention other round churches built in the same age; but have left us no descriptions of them. It is evident, however, from the examples abovementioned, that many round churches were built by the Christians in different parts of the world, in the fourth and fifth centuries; and as that which covered the Holy Sepulchre at Jerusalem was built in that form, Charlemagne might be induced to build his church at Aix la Chapelle in that manner, in imitation of it.

After the death of Charlemagne, Jerusalem fell again into the hands of the Infidels, who kept it until Godfrey of Bouillon,

[l] Rotundo schemate a fundamentis constructa & concamerata. De Locis Sanctis, cap. xix.

who commanded the Christian armies in the first croisade, recovered it, and was crowned king of Jerusalem in the year 1097: but Godfrey died in the year 1100; and after his death the Saracens continually molested his successors, and plundered the pilgrims who went to visit the holy places about Jerusalem. For their protection the Knights Templars were instituted, in the year 1118; and the care of the Holy Sepulchre being given to them, apartments were allotted them near the church, where they lived in subjection to the patriarch, like regular canons, having renounced property, and made a vow of celibacy and obedience. At first they were but nine in number, until Pope Honorius the Second gave them a rule, and assigned them a habit. Their numbers being then unlimited, they amounted to about 300 in the convent at Jerusalem only, besides those who were settled in various parts of Christendom, where they acquired vast revenues: but in the year 1134 all the knights who were in the convent at Jerusalem being slain by the Infidels [*m*]. It is probable those who were settled in various parts of Europe began then to build round churches, resembling (as well as they could) that which stood over the Holy Sepulchre.

At this time the Jews being very numerous in England were permitted to build synagogues in the towns where they were settled; but at a time when the Church of the Holy Sepulchre was held in the greatest esteem by Christians in general, and by the Templars in particular, we cannot believe they would be permitted to build them in that form, had not their natural aversion to the Christian Religion prevented their imitating a building which was intended to commemorate an event which they wished to have forgotten; and from hence we may conclude, that none of the round churches remaining were built by them;

[*m*] Interfecti sunt omnes milites Templi Domini. M. Paris, p. 73.

and if ever they built their synagogues in that form, it was before the destruction of Jerusalem by Titus.

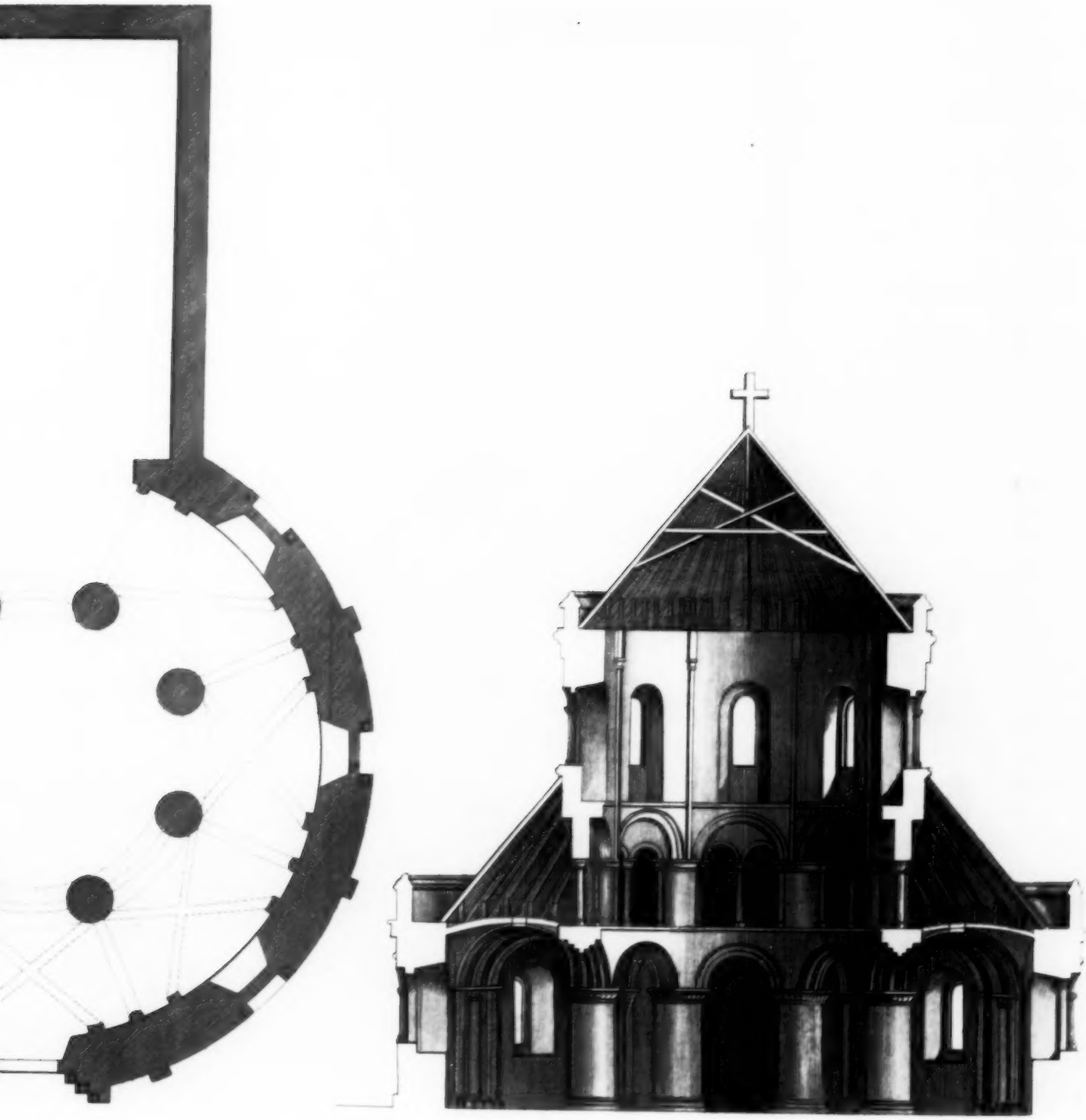
The round churches we have in England were some of them built by the Templars themselves; as that in London, in the year 1185, and dedicated (by Heraclius, Patriarch of Jerusalem) to the Virgin Mary. They built some in places where they had large estates, as at Baldock, in Hertfordshire [*n*], and several others we have no account of; most of which have been rebuilt, or were originally in the common form: but round churches were sometimes built by private persons, and given to the Templars. The round church at Little Maplested, in Essex, near Castle Hedingham, was dedicated to St. John at Jerusalem, and given to the Templars by Juliana, wife to William son of Audelin, steward to Henry the Second.

Besides the churches erected by the Templars, or built for them by their pious benefactors, it was customary, during the croisades, to build parish churches in honour of the Holy Sepulchre [*o*]; and as parishes take the names of their churches, from thence we have the church and parish of St. Sepulchre, in London, and other places. But as it was usual to dedicate them in commemoration of the Holy Sepulchre in Jerusalem, so in some places, the church is called St. Sepulchre, and the parish the Jewry: and as these churches were built by the Templars, or persons concerned in the Croisades, most of them were made circular, in imitation of that at Jerusalem; such is the round church in Cambridge, and that at Northampton, and if there are others of this name, but of a different form, it is probable

[*n*] Chauncey, p. 382.

[*o*] There is a monastery of the Resurrection about 30 miles from Moscow, called the New Jerusalem, because built upon the model of the church of the Holy Sepulchre by the patriarch Nichon. Dr. King's Rites and Ceremonies of the Greek Church in Russia, p. 33. Constantine built a church at Rome, called Sessorian Basilica, sive *Ecclesia S. Crucis in Hierusalem*. Ciampini de Sacris Aedificiis, p. 116.

The Church of the Holy



Sepulchre in Cambridge.

20 30 40 50 feet

The

bable they have been rebuilt ſince their firſt dedication. Thus we may reaſonably account for the building of thoſe round churches which ſtand in places called the Jewry, without ſuppoſing they were built by the Jews for ſynagogues; it being very improbable that they would build them in that form, or that the Chriſtians would permit them to do it.

THE round church at Cambridge (a plan of which is annexed [*p*]) is properly called the church of the Holy Sepulchre [*q*] in the Jewry; and from thence aroſe the vulgar opinion that it was a Jewiſh ſynagogue, and that the Jews lived there: but having ſhewn that the Jews had their ſynagogue, and lived in another part of the town, we may conclude that this church was built by the Templars, or by ſome perſon concerned in the Croiſades. It will be eaſier to aſcertain the age, than to tell who was the founder of it: for the age may be nearly aſcertained by the ſtyle of the building, which, notwithſtanding the alterations and additions which have been made in it, has ſo much of the original left, that I have been able to trace all its parts, and repreſent it in the ſtate which the builders left it: and from thence I may venture to pronounce that it was built in the reign of Henry the Firſt, or between the firſt and ſecond Croiſades; and is, I apprehend, the oldeſt church of this form in England, being built before the Templars became maſters of the vaſt property they had afterwards in this and other parts of Europe.

WE have no certain account that the Templars poſſeſſed any part of what is called the Jewry; but that they did not poſſeſs the whole in the time of Edward the Firſt is certain; for in the year 1276, the fourth of his reign, one Robert Fulburn gave

[*p*] Plate XX.

[*q*] In 1255 it was valued at 1 M. by the name of *Ecc. Sti. Sepulchri*, in a Taxation made of all eccleſiaſtical and temporal eſtates, according to their true value throughout all England.

ſome ſtone houſes oppoſite St. Sepulchre's church to the cannons of Bernwell [q]. This was 37 years before the order of Templars was diſſolved; therefore could not have been part of their habitations: of thoſe houſes there is now nothing remaining.

There was formerly in this pariſh an ancient houſe, called *Bede's houſe*; in which ſome have ſuppoſed venerable *Bede* lived and ſtudied [r]. But beſides the improbability, that a common dwelling-houſe built in the ſeventh century ſhould be ſtanding in the ſixteenth, it may be doubted whether Bede ever lived in Cambridge. I have no doubt, however, of there having been a houſe ſo called, which might be built when the church was, for the reception of Beads-men, to pray for thoſe who were engaged in the wars for recovering the Holy Land from the Saracens; and therefore not improperly called the Beads-houſe; which name it might retain ſome centuries after the uſe of it was forgotten, and the Beads-houſe would be eaſily miſtaken for Bede's Houſe.

As the church was built within a few years after the firſt eſtabliſhment of the order of Templars, we cannot ſuppoſe it was built by them, but by ſome perſon who had been in the firſt Croiſade, or, intending to engage therein, built it, and appointed a number of Beads-men to pray therein for the ſucceſs of their arms and ſafe return: and as churches of this ſort were ſometimes built by private perſons, and given to the Templars; by this means the advowſon of it, and the Beads-men's houſe, might come into their poſſeſſion [s], if it ever belonged to them.

[q] Parker's Hiſtory of Cambridge, from a MS. in the Cotton Library.

[r] Betwixt St. John's College and the Round Church, or St. Sepulchre's. Fuller's Church Hiſt. p. 98.

[s] The Baptiſtery at Piſa in Italy may be ranked among the Round Churches, and was begun about thirty years after the church at Cambridge, and finiſhed in the year 1160, by Deotiſalvi, an eminent architect of that age. Joſephi Martinii Theatrum Baſilicae Piſanae.

The

THE parish called *the Jewry* is but small, and it seems was originally taken out of All Saints, the advowson of which belonged to a small Benedictine Nunnery in the adjoining parish of St. Radigund, to whom, in the year 1122, Pope Honorius the Second granted the impropriation of the Rectory of St. Clement's [*t*], probably as a recompence for what was taken from the parish of All Saints when St. Sepulchre's church was built, which was about that time, and when he appointed a habit for the Templars, and gave them a rule for their government.

IN the year 1134, Henry Frost, a burgess of Cambridge, founded an Hospital in the same parish, and dedicated it to St. John the Evangelist [*u*], which being enlarged by Nigellus Bishop of Ely, the nuns were recompenced by a small rent, paid out of some grounds lying in St. John the Baptist's parish [*x*]: but by these foundations the parish of All Saints was almost all taken away, and the nuns, who were poorly endowed, suffered very much, until Malcolm IV. king of Scotland, at that time Earl and Lord of all the town of Cambridge, gave them ten acres of land adjoining the nunnery for their better support; he likewise united the parish of St. Radigund to the remains of All Saints, and gave that church to the nunnery. Since that time, which was in the year 1160, the two parishes have been called by the name of All Saints, and the church is now called *All Saints in the Jewry*, and formerly *All Saints near the Hospital*, to distinguish it from All Saints near the Castle; it being near the Hospital of St. John the Evangelist before mentioned [*y*], but not properly in the Jewry [*z*].

[*t*] Parker's Hist. Camb. p. 116.
[*u*] Tanner's Notitia Monastica, p. 43.
[*x*] Archives of Jesus College.
[*y*] Now St. John's College.
[*z*] In a taxation roll, 1255, it is called *Om. Sanctorum juxta Hospitale.*

AFTER

After the order of Knights Templars was diſſolved in the year 1313, the advowſon of St. Sepulchre's church was given to the priory of Bernwell [a], at which time (as I apprehend) the church was raiſed a ſtory higher, for the reception of bells, and the chancel was then added, and dedicated to St. Andrew [b], the patron of Bernwell-priory, in which the preſentation continued until that was diſſolved by Henry the Eighth, and is now in the gift of the Biſhop of Ely.

I think there can be no doubt either of the time when this church was built, or that they who built it intended it ſhould reſemble the church of the Reſurrection or Holy Sepulchre in Jeruſalem; and I muſt obſerve, that as far as can be judged from the deſcriptions given of that church, this is the beſt copy we have of it in England: but a perfect reſemblance muſt not be expected, where the ſmallneſs of one compared to the other would make an exact imitation no better than a large model, which could be of no uſe but to amuſe the curious. This church, in its preſent ſtate, appears under a variety of diſadvantages, ariſing from the many alterations and additions it has undergone ſince it was firſt built; but that the real deſign of the architect may be ſeen, I have (as far as my knowledge of the ſeveral ſtyles of architecture extends) endeavoured to reſtore what has been loſt or changed, and remove what has been added. But notwithſtanding the drawings I have made [c] are from an actual ſurvey, they will appear very different from the preſent church, if compared with the building itſelf by thoſe who are unacquainted with the peculiarities of each ſtyle. In its preſent ſtate it is a ſtory higher

[a] As this church was not taxed among the ſpiritualities belonging to the priory of Barnwell in the year 1291, twenty-two years before the order was diſſolved, it probably did not belong to them until after the year 1313; but it is uncertain to whom it belonged before.

[b] Blomfield's Collect. Cantab.

[c] See pl. XX.

than

than the architect intended it ſhould be. This addition was made for the reception of bells in the reign of Edward the Second, and all the windows (except one now out of view) were then altered to give more light. The preſent chancel was likewiſe added at that time, and the ornaments about the door were defaced and partly hid by a wooden portal; but, to compleat the deformity, a modern building has been added on the north ſide of the chancel. All theſe additions are omitted, and the alterations reſtored in the plan and elevation. But the inſide is as much deformed as the outſide: a gallery has been built juſt above the arches, which reduces the circle to a ſquare, and by its projection hides the pillars and arches of the upper portico. Pews, which are no ornament to any church, and never intended in this, fill the area below, and not only incumber the pillars, ſo that they appear much heavier, and more out of proportion, than they are, but deſtroy the real form and apparent magnitude of the building; all theſe are omitted in the ſection, where the windows and other parts are drawn as they were originally, not as they are now, that thoſe who are curious in the antiquities of thoſe times may ſee what ſort of building it was, and the true form which the architect gave it.

From the preſent irregular appearance of this and many other churches which paſs under the general appellation of Gothic, it is natural to conclude, that the architects in thoſe days had no idea of proportions or convenience, nor any rules to direct them in the formation of their plans or execution of their works, but that all they did was the effect of meer chance; yet, if we impartially examine this building cleared of all the incumbrances which have been added to it, in different ages, we ſhall find it once was regular, and we may believe the perſon who planned it was not ignorant of practical geometry, that he

knew ſomething of proportions though he wanted taſte, and like the celebrated Sir John Vanbrugh, who was well acquainted with the proportions of Greek and Roman architecture, he wanted judgement to apply them, and gave to the various parts of this building ſuch as were calculated to make it ſtrong rather than beautiful, which made it appear more like a caſtle than a church on the outſide, and heavy and gloomy within. But it is not my deſign now to enter upon a minute deſcription of the architecture of this building, becauſe I may hereafter have occaſion to take notice of it, in a work purpoſely intended to explain what relates to the various ſtyles of architecture which come under the general denomination of Gothic;—if I ſhould live to compleat it.

XXIV. *A Deſcription*

XXIV. *A Description of an antient Picture in* Windsor *Castle, representing the Embarkation of King* Henry VIII. *at* Dover, May 31, 1520; *preparatory to his Interview with the* French *King* Francis I. *By* John Topham, *Esq.* F. R. S. F. S. A.

Read June 21, 1781.

THE general advantages which arise to the Antiquary and Historian from the preservation of such authentic historical representations as are coeval with the transactions they record, and the reasons which occasioned the interview between the two kings of England and France, as well as the manner in which that scene of pomp and magnificence was conducted and carried into execution, have been already so ably and elaborately demonstrated by our late worthy Vice President, Sir Joseph Ayloffe, Bart. in his "Historical description of an antient picture in Windsor Castle representing the interview between king Henry VIII. and the French king Francis I. between Guînes and Ardres, in the year 1520," printed in the works of this Society [a]; that it will now only be necessary to refer

[a] Archaeologia, vol. III. p. 185.

to that learned deſcription upon thoſe heads, and confine our preſent obſervations to the matters ariſing from a view of the picture before us, diſtinctly from the other painting; and for that purpoſe, to bring to the recollection of the Society, that after every regulation had been made, and preliminary ſettled by Cardinal Wolſey for this interview taking place in June 1520, king Henry VIII. removed from his palace at Greenwich on the 21ſt of May on his way towards the ſea; the firſt day he went to Otford, then to Leeds Caſtle, then to Charing, and from thence on the 25th he reached Canterbury, where he propoſed to keep the approaching feſtival of Whitſuntide [*b*].

ON the next day king Henry received an account of the unexpected arrival off Hithe of the Emperor Charles V. on his return out of Spain. The Emperor was ſaluted by the Vice Admiral of England, Sir William Fitz-William, afterwards earl of Southampton, who then lay with a fleet of the king's ſhips for the protection of the paſſage between Dover and Calais. Cardinal Wolſey was immediately diſpatched to receive his Imperial Majeſty at Dover, and towards the evening of the ſame day the emperor landed in [*c*] Dover harbour, where he was met by the cardinal, and by him was conducted to the caſtle of Dover.

THE arrival of the emperor, and the manner in which he was received and entertained during his ſtay in England, is ſo minutely deſcribed by Stowe in his [*d*] Chronicle, that I ſhall give it in his own words.

[*b*] Stowe's Chronicle.

[*c*] A curious picture, in the valuable collection of the right hon. lord viſcount Montagu at Cowdray, preſerves this ſcene of the arrival of the emperor. The two fleets are given at a diſtance; the emperor is repreſented as deſcending from his ſhip into a boat, and the cardinal with his attendants are waiting to receive him on the beach in Dover harbour.

[*d*] P. 506.

"THUS

"THUS landed Charles the Emperor at Dover under his cloth "of estate of the black Eagle all fret on rich cloth of gold; in "whose company was the queen of Arragon with divers noble "estates and faire ladies of his country and blood, which were "received at the sea side by the lord legate cardinal and other "lords and gentlemen. The emperor, so accompanied, at ten "of the clock at night by torch light was brought to the castle "of Dover, where he rested, and there Sir Edward Poynings, "warden of the Five Ports, brought to the emperor the keys "of the castle, who refused them, saying he knew well that "he was out of all danger and as safe as if he were at home "in his own realm. The same night about two of the clock "the king came to Dover by torch light; and as soon as "the emperor heard of his coming, he arose and met the "king at the stair head, where either embraced the other in "his arms, and there they talked together a long time, and "always the king had the emperor on his right hand. On "the morrow, which was Whitsunday, the king and the em-"peror, with all the other estates, rode unto Canterbury, "the sword born by the earl of Derby riding between them "both, by the kings commandment. And so these princes "rode to Canterbury and to Christ's church, where they were "received with general procession by the lord cardinal and "others. The king and the emperor went both under one "canopy unto Thomas Becket's Shrine, where they made their "prayers and oblations, and then went to the archbishop's "palace where the queen of England, the emperor's aunt, "met him going into the great chamber, of whom he was joy-"fully received and welcomed. The emperor and the king "took a little recreation, and then went to high mass where "they offered, first the emperor and then the king, and so re-

"turned

" turned to their traverses set apart, and after went to dinner, " at which service the Emperor's trumpets sounded, and not the " King's.—On Monday at nine of the clock at night was begun " a banquet, which endured till the next morning at three of the " clock; at the which banquet the Emperor, the King and the " Queen did wash together; the duke of Buckingham giving the " water, the duke of Suffolk holding the towel. Next them " did wash the Cardinal, the Queen of France, and the Queen " of Arragon.—At which banquet the Emperor kept the state, " the King sitting on the left hand, next him the French Queen, " and on the other side sat the Queen, the Cardinal, and the " Queen of Arragon; which banquet was served by the Empe- " ror's own servants.

" ON Tuesday these estates departed out of Canterbury.—The " Emperor brought the Queen his aunt on horseback to Dover " ward.—Then the Emperor and the King kept company toge- " ther till they came to the Downs, where they parted.—The " Emperor went to Sandwich and to his fleet, which were in " number great ships with two tops apiece, 44."

THE reason of this sudden arrival of the Emperor, our historians inform us, was to endeavour to dissuade Henry from prosecuting his intended expedition into France; and he is said to have made large offers to Henry to break off his connexions with the French king, with whom the Emperor was at variance. In this attempt, however, Charles failed, for immediately upon their separation Henry proceeded to Dover, and the preparations for the embarkation were carried on with the utmost expedition.

THE vast number of the nobility and others, who were appointed to attend the king into France, necessarily took up much time in embarking. The Cardinal Legate, the archbishop of Canterbury, the bishops of Durham, Ely, Chester, and Exeter, the arch-

archbishop of Armagh, the dukes of Buckingham and Suffolk, the marquis of Dorset, the earls of Shrewsbury, Essex, Devonshire, Westmoreland, Stafford, Kent, Wiltshire, Worcester, Northumberland, Oxford, and Kildare, made part of the train; besides other lords, knights, ladies, &c. The number of persons attendant upon the king and queen were, according to Stowe, 4334, having with them 1637 horses; besides those of the dowager French queen and the duke of Suffolk her husband, and the Cardinal; the last of whom was attended by 12 chaplains, 50 gentlemen, 238 servants, and 150 horses.

The necessary preparations being compleated, the king himself embarked early on Thursday morning the 31st of May, and the wind being fair for his passage over, he arrived at Calais about eleven o'clock on that day.

It is the view of this embarkation that the painting now before us perpetuates. The ship called the *Harry Grace de Dieu*, or the Great Harry, is represented as just sailing out of the harbour of Dover, having her sails set. She has four masts, with two round tops on each mast, except the shortest mizen; her sails and pendants are of cloth of gold damasked. The royal standard of England is flying on each of the four quarters of the forecastle, and the staff of each standard is surrounded by a fleur de lis, Or. Pendants are flying on the mast heads, and at each quarter of the deck is a standard of St. George's cross. Her quarters and sides, as also the tops, are fortified and decorated with heater shields or targets, charged differently with the cross of St. George. Azure a fleur de lis, Or. Party per pale Argent and Vert [*e*] a union rose. And party per pale Argent and Vert a portcullis, Or, alternately and repeatedly.

[*e*] Green and white were the favourite badges of the house of Tudor.

On

ON the main deck the KING is ſtanding richly dreſſed in a garment of cloth of gold edged with ermine, the ſleeves crimſon, and the jacket and breeches the ſame. His round bonnet is covered with a white feather laid on the upper ſide of the brim. On his left hand ſtands a perſon in a dark violet coat ſlaſhed with black, with red ſtockings; and on his right hand are three others, one dreſſed in black, another in bluiſh gray guarded with black, and the third in red guarded with black, and a black jacket ſlaſhed; theſe are evidently perſons of diſtinction; behind them are yeomen of the guard with halberts. Two trumpeters are ſitting on the edge of the quarter deck, and the ſame number on the forecaſtle ſounding their trumpets. Many yeomen of the guard are on both decks. On the front of the forecaſtle are depicted party per pale Argent and Vert, within a circle of the garter, the arms of France and England quarterly, crowned; the ſupporters a lion and a dragon; being the arms and ſupporters then uſed by king Henry VIII. The ſame arms are repeated on the ſtern. On each ſide the rudder is a port hole with a braſs cannon, and on the ſide of the main deck are two port holes with cannon, and the ſame number under the forecaſtle. The figure on the ſhip's head ſeems to be meant to repreſent a lion, but is extremely ill carved. Under her ſtern is a boat, having at her head two ſtandards of St. George's croſs and the ſame at her ſtern, with yeomen of the guard, and other perſons in her.

ON the right of the Great Harry is a three-maſted ſhip, having her ſails furled, and broad pendants of St. George's croſs flying. She has four royal ſtandards on her forecaſtle, and on each ſide the rudder is a port-hole and a cannon. On the upper deck are eight guns on each ſide, and on the lower deck two. Her ſides and tops are ornamented with ſhields charged with the ſame arms as thoſe of the Great Harry, with the addition of one

on her ſtern, viz. Party per pale Argent and Vert a fleur de lis, Or. The forecaſtle and quarter deck are crouded with perſons apparently of the king's ſuit. Near her ſtern is a boat with a ſingle perſon in it.

Between theſe two ſhips is a long-boat or pinnace filled with a number of perſons, chiefly yeomen of the guard, with their partizans. At the head are two broad pendants, barry of two Argent and Vert, on the one is a union roſe, and on the other a portcullis, Or. Between them ſtands a perſon who reſts his hand on the ſtaff which ſupports one of the pendants. At the ſtern are two other broad pendants, barry of two Argent and Vert, on the one a fleur de lis, Or, and on the other a union roſe.

On the right of this laſt mentioned ſhip, near the ſhore, is another boat filled with perſons ſeemingly of diſtinction. At its head are two broad pendants, on one of which is a fleur de lis, Or, and on the other a union roſe. At the ſtern are two other broad pendants, the one having a union roſe, and the other a portcullis, Or. A man ſits at the head with a hat and feather, beating a drum.

These two ſhips are followed by three others, each having pendants of St. George's croſs flying; their ſides and tops are ornamented with ſhields charged like the former. That in the foreground of the piece hath four maſts; a ſail is hoiſted on one of the mizen maſts, and one is hoiſting on the fore maſt; the ſail on the main maſt is furled, but the top and mizen ſails are looſe. On her forecaſtle three royal ſtandards are viſible, the fourth being hid by the fore ſail. On her ſtarboard ſide is a boat from whence ſeveral perſons are aſcending into the midſhip by means of the ſhip's ladder. On the ſtern of this ſhip is painted on a ground paly of four the royal arms of England. France is coloured Vert three fleurs de lis, Or: the ſupporters are a lion and a dragon. Above theſe arms are three port-holes with cannon, and above them is a union roſe and a fleur de lis, Or.

THE next are two three-masted ships ornamented and decorated in a manner nearly similar to those already described; in the stern gallery of one of them are three persons looking out of the windows; he in the center has a hat and feather on his head, and is apparently a person of considerable distinction.

ALL these ships have brass and iron cannon pointed out of the port-holes, and are crouded with passengers; some of whom are looking over the railing of the galleries, and others out of the cabbin windows.

BETWEEN these ships and the shore are two boats carrying passengers on board the ships. In the stern of one of them is an officer dressed in green, slashed, holding up an ensign, or ancient of five stripes, white, green, red, white and green, similar to the colours of the adjacent fort. Near him sits a drummer beating his drum, and a fifer playing on a fife.

IN the offing is represented a variety of other ships under weigh, having their sails set; and in the distant view the white cliffs on the coast of France between Bologne and Calais are seen, and the castle at Calais is apparent.

IN the foreground of the picture, close to the water's edge, are two circular forts, communicating with each other by a terrace. One of these forts contains two tier of cannon, the other three; they are represented as firing a royal salute. On the platform of the westernmost fort are eight embrasures mounted, and on it is a man displaying the colours of St. George. On the platform of the other fort are thirteen embrasures with brass and iron cannon, and two other tier below it. A man displays a pair of colours of five stripes, white, green, red, white and green, similar to those in the boat which is near. At the foot of this fort are two men, one of whom is gathering up cannon balls, and putting them in the leathern apron of his companion.

ON

On the terrace are ſeveral bill men and yeomen of the guard; ſome ſtanding to obſerve the departure of the ſhips, and others going into the forts.

Near the middle of the terrace is a gentleman dreſſed in a green and yellow jacket, with ſlaſhed ſleeves and breeches, and white ſtockings; over all he wears a black cloak; he has a yellow ruff round his neck, ſhort yellow hair, wears a black bonnet, and at his ſide a long ſword, the hilt of which he holds in his left hand; he is preceded by two bill men, and before them is an officer having a dagger at his ſide, and carries on his left ſhoulder a ſword of ſtate; this gentleman is obviouſly a perſon of diſtinction, probably ſir Edward Poynings, then conſtable of Dover caſtle, and warden of the Cinque-ports.

A page is repreſented as going towards the weſternmoſt fort, beautifully dreſſed, carrying a ſword on his ſhoulder, to which is ſuſpended a target, richly ſtudded. The dreſſes of the bill-men are various, but are well repreſented.

A perſon is ſeen ſitting on the rock near the inner fort, having a high-crowned hat on his head; probably a Dutch ſailor obſerving the embarkation.

On the hill which forms the oppoſite point of the harbour is ſeen the caſtle of Dover. The tower over the principal gateway, and ſome of the other towers here repreſented, exactly correſpond with the view which that magnificent and ſtupendous building now exhibits from the ſame ſituation.

The view being taken from the ſouth-weſt point of Dover harbour, and extending acroſs the harbour eaſtward to the caſtle, leaves the town of Dover in the cod of the bay to the north, undeſcribed.

The two forts here deſcribed were the *Arch-cliff* fort to the weſt, and the *Black bulwark* to the eaſt. The picture in the collection of lord Montagu abovementioned exhibits theſe two forts as being near the foot of the round hill called Shakeſpear's cliff;

and a plan of the town and harbour of Dover made in the reign of Queen Elizabeth (ſee plate XXI.) points out with preciſion the ſituation of theſe two forts. A valuable MS. in the library of our worthy member, Guſtavus Brander, eſq; containing an account of the ordnance, ammunition, and ſtores of Henry VIII. taken ſoon after the death of that king, gives us an exact ſtate of the furniture of theſe two forts at that time; by which it appears that there were in the Arch-Cliff fortreſs four pieces of braſs, and twenty-four pieces of iron cannon, and in the Black bulwark three pieces of braſs and ſixteen pieces of iron cannon. This account, preſerving to us the names of the different kinds of ordnance and military inſtruments then in uſe, cannot be unentertaining to the Society.

"*The Fortreſſe of Archeclief beſides the Peere of* Dover."

ORDYNAUNCE * and munytions belonging to the ſaid fort in the chardge of Edmund Mondye, Captain, viewed the month of January, An. Reg. Edw. Sexti primo.

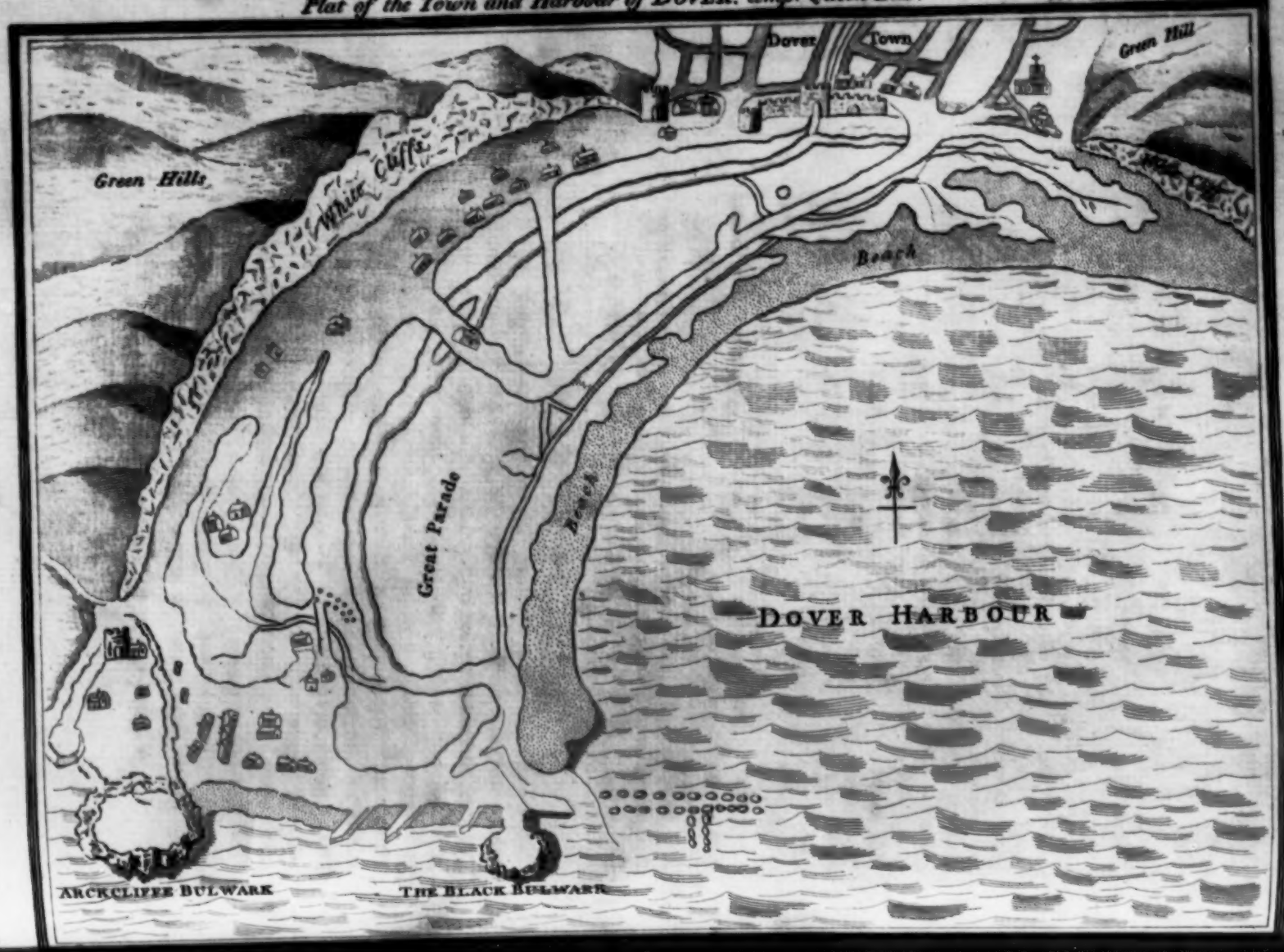
Demy culveryns of braſſe - - -	1
Sacres of braſſe - - - -	2
Fawcons of braſſe - - - -	1
Fowlers of iron - - - -	1
Single ſerpentynes of iron - - -	3
Baſis of iron - - - -	12

Hag-

* Ordnance in England is diſtinguiſhed into two kinds; *Field pieces*, which are from the ſmalleſt to 12 pounders; and *Cannon of Battery*, which are from a culverin to a whole cannon. Each of theſe diviſions is again ſubdivided: the firſt into baſe, rabinet, falconet, falcon, minion ordinary, minion largeſt, ſaker leaſt, ſaker ordinary, demi-culverin leaſt, and demi-culverin ordinary: the ſecond into culverin leaſt, culverin ordinary, culverin largeſt, demi-cannon leaſt, demi-cannon ordinary, demi-cannon large, and royal whole cannon. Chambers's Dict. voce *Ordnance*.

DIFFERENT nations, it is to be obſerved, give different proportions to pieces of the ſame denomination; ſo that we have an Italian, a German, a French, and an Engliſh ſet of *cannons*, all differently adjuſted. Chambers's Suppl. voce *Cannon*.

Plat of the Town and Harbour of DOVER. *temp. Queen Eliz.* Vol. VI. Pl. XXI. p. 208.



Hagbushes of iron - - -	4
Powder - - - - - -	oone last.
Demy culveryne shotte - - -	50
Sacre shotte - - - -	100
Fawcone shotte - - - -	50
Fowler shotte of stone - - -	20
Serpentine shotte - - - -	20
Basis shotte - - - -	100
Hagbushes shotte - - -	100
Bowgies - - - -	30
Sheiffs of arrowes - - -	60
Bowe stringes - - - -	demy grosse.
Morris pickes - - - -	20
Blacke bills - - - -	50

Sir William Monson in his Naval Tracts written in the reign of Queen Elizabeth and James I. treating on the distinct practice or special duties of officers belonging to the King's ships at sea, in "the office of gunner", gives the following account of the names, and dimensions, weight of the cannon, shot, and powder of the ancient English ordnance.

Names.	Bore of cannon. Inches.	Wt. of cannon. lb.	Wt. of shot. lb.	Wt. of powder lb.
Cannon royal	8½	8000	66	30
Cannon	8	6000	60	27
Cannon serpentine	7	5500	53½	25
Bastard cannon	7	4500	41	20
Demi cannon	6¾	4000	33½	18
Cannon petro	6	4000	24½	14
Culverin	5½	4500	17½	12
Basilisk	5	4000	15	10
Demi culverin	4	3400	9½	8
Bastard culverin	4	3000	5	5¾
Sacar	3½	1400	5½	5½
Minion	3½	1000	4	4
Faulcon	2½	660	2	3½
Falconet	2	500	1½	3
Serpentine	1½	400	¾	1½
Rabinet	1	300	½	¾

"*The*

"*The Black Bulworke at the Piere of Dover, in the Countie of Kent.*"

THE ordynaunce and munitions of warre being within the ſaid bulworke, in the chardge of the ſaide Mondye, Captaine.

Baſilliſches of braſſe	1
Culverynes of braſſe	1
Demy culverynes of braſſe	1
Porte pieces of irone	6
Slinges of iron	3
Baſis of irone	7
Demy ſlinges	5
Baſilliſche ſhotte	150
Culveryne ſhotte	100
Shotte for porte pieces	40
Slinge ſhotte	20
Demy ſlinge ſhotte	40
Baſſe ſhotte	100

THE pier and harbour of Dover have been formed and ſupported at an immenſe expence. Lambard, in his Perambulation of Kent *, tells us, that king Henry VIII. expended 63000l. upon a pier to reſtore the haven, but in vain. And Camden in his Britannia †, ſays, that "king Henry VIII. "built a mole or pile wherein ſhips might ride with greater "ſafety. It was done with much labour and at infinite charge, "by faſtening large beams in the ſea, then binding them toge-"ther with iron, and heaping on great quantities of wood and "ſtone. But the fury and violence of the ſea was quickly too "hard for the contrivance of that prince, and the frame of the "work, by the continual beating of the waves, began to diſ-"joint and fall into decay." Harris, in his Hiſtory of Kent ‡,

* P. 147. † P. 250. ‡ P. 103.

gives

gives the following account.—" As to the famous piere of Do-
" ver, I find by the Dering MSS. that king Henry VIII. laid out
" here above 80000l. in that work, making a bulwark which
" from Arcliff ran far out into the sea to the eastward, and here-
" by was gained much firm ground. In this place he made
" motes and bulwarks, and appointed officers and soldiers to keep
" guard here. These had also the care of the Black Bulwark.

" In process of time the sea brought such quantities of beach
" upon the pier, especially about a fort on it called the Black
" Bulwark, that it drove through the piles, and choaked up the
" harbour, making a shelf of beach from thence easterly to the
" bottom of the cliff, called Castle Ray; and this ruin of the
" pere continually increased, both by the neglect of repairing it,
" and also by the poor people's stealing the wood and iron
" from it."

In the reign of queen Elizabeth, the mayor, jurates, and commonalty of Dover presented a petition to the lords of the council, stating the importance of the harbour of Dover, the ruinous state and condition in which it then was, and proposals for the reparations and works which were then thought necessary to be made, and prayed their lordships to devise some means for carrying the proposed plan into execution *.

In

* This petition containing some curious facts, it may not be improper to preserve it.

To the right honorable lordes and others of the Queens Maiesties' most honorable privie Councell.

In most humble wise complayninge, beseechen yor honors yor humble orators the maior jurates and cõialtie of the Queens Maties towne and porte of Dover in the countie of Kent. That whereas the harbo^r of Dover is of late yeres fallen into greate decaye and ruyne, and in few yeres to come is verie like to fall into utter distruccion, being a place of suche necessarie service for this realme. What necessarie

IN conſequence of this repreſentation, various means were thought of for carrying this neceſſary, though expenſive, plan into execution. A tax or licence of half a crown on every public houſe in the kingdom for a certain number of years was propoſed, but not agreed to. At length an act of parliament paſſed in the 23d year of Eliz. (cap. 6.) for laying a duty upon every veſſel above the burthen of 20 tons, ſailing into, or out of, any port in the kingdom, for the term of ſeven years. That term was continued for ſeven years longer by the ſtatute of 31ſt of Eliz. cap. 13. and was again renewed for ſeven years by the ſtatute of the 1ſt of king James, cap. 32.

To carry the plan of forming the preſent pier and harbour into execution, the Black Bulwark was taken down, and the weſt head of the pier then erected was built upon its foundation. The Arch-Cliff fort has been ſince that time new modelled, and ſtill remains a ſtrong fortification.

THE

neceſſarie ſervice that harbo^r hath done to the noble kings of this land, ſpeciallie in the tymes of all theire victorious warres, we nede not to ſett forth to yor honors, for that to ev'ye of you, the ſame is ſufficientlie knowen: what ſervice it doth dailie in the tyme of peace (and would doe more if it were not ſo decayed) it were too tedious to expreſſe to yor hono^rs; ſynallie wee yor poor ſuppliants in o^r ſymple opynions, doe not thinke that any thinge is more requiſite for the com'on weale and ſafetie of this o^r naturall country, than the repayring of the ſaied harbo^r for the ſundrye and manye com'odities that the Kinges of this land and o^r whole countrey have receaved, and might daylie more and more receave by the ſame: and wee yor ſaied humble orato^rs thinkinge it o^r bounden duties, not onelie to be contynuall ſutors to her Matie and yor hono^rs for amendment of the preſent decayes, wch the ſaied harbo^r is now in (as often heretofore wee have bene,) but alſo not to pretermitt at anye tyme anye manner of ſervice or dutie wch lieth in o^r com'on wealth and countrey, have of late ſent over into Flanders for ſundrie men of experience of that countrey, to come hither, who upon good deliberacion and view taken, have ſett downe as well a perfect platt, ſhewing how it may be made a verye good harbo^r to contynewe for ever, as alſo a perfect and playne demonſtracion of the whole charges wch it will amount unto (as themſelves have promiſed to undertake w^ch

good

THE uncommon form of the ships represented in this picture cannot escape observation. The vast height of the masts, the distance from the upper deck and stern gallery to the edge of the water, the shape of the forecastle and the quarter deck, and the ornaments and decorations of the whole, exhibit a view extremely striking and unusual.

CONSIDERABLE changes having taken place at different times, in the form and magnitude of ships used in this kingdom; it may not be displeasing to the Society to lay before them some observations, so far as they can be supported by authentic information, upon the subject of the English navy previous to its being regularly established by king Henry VIII.

good sureties to performe) that is to saye, Sixtene thousand cc pounds and od' money, w'ch is lesse by XXX. m. lib. at the leaste than the same hath bene estimated at heretofore: And thereuppon we have also brought certen Englishmen of good experience to the said view, who doe not only like and allow of the Duchemens devise and plott, to be the best way that canne be taken for making of the same wherebye it may be serviceable for ever, but also doe agree that it will be performed for that some wch they have so sett downe. And further (right honorable Lords) if this good oportunyti: be not now taken for makinge the said harbo', neither if her Matie doe not presentlie repaire the olde wood woorke at the peere head wth two groynes to be new made agreablye to a note thereof sett downe by the said Duchemen, with great expedicion, it is not onelie verie like that the most parte of her highnes howses there will in short time be eaten up with the sea, but also that place wch now will serve to be made so good a harbour wil be utterly spoy'ed with abounddaunce of beache or preple that the sea will cast in at the new breache, and so never hereafter anye harbo' to be made there, wha soever neede shall be thereof for anye cost or charges whatsoever. Wherefore we humbli: beseeche yo' hono' to be the meanes to the Quenes most excellent Matie that some devise may be made for sevinge of money and establishing of good order by yo' honourable discrecions fo: the said worke in convenient tyme to be taken in hande. And we yo' said poore orato^rs accordinge to o' bounden duties shall daylie praye to God for the preservacion of yo' hon^rs.

OUR historical accounts before the arrival of the Saxons in this country are too vague and deficient to furnish us with positive information upon the subject of this enquiry. King Alfred is generally deemed the founder and promoter of our naval strength. Navigation, till that period, had been but little understood, and long voyages seldom attempted. The laws of King Athelstan gave peculiar encouragement to navigation; the merchant, who had been thrice across the high seas upon his own account, became intitled to the rank and privileges of a thane *. King Edgar's ships had increased to a number almost incredible. Some of our historians † make them amount to between three and four thousand. These, however, supposing the numbers to be true, must be considered in point of size to be small and insignificant.

THE royal navy had no existence in those times, except in the pinnaces or barges for the king's own use. The different sea-ports of the kingdom were bound by their tenure to supply their quota of ships whenever the public service required it. The ports in Kent and Sussex, as commanding the passage of the narrow seas, had particular encouragement given them to promote the naval strength of the kingdom. At the time of the compilation of that authentic and venerable record, Doomsday-book, those ports were found to have enjoyed various franchises and immunities under our Saxon monarchs, upon condition of their supplying a certain number of ships, manned with a certain number of mariners, for a given time every year. When the time of their bounden service was expired, they were to be retained at the charge of the King by whom their assistance was called for.

* Wilkins's Saxon Laws, p. 71.

† Florence of Worcester, Hoveden, and others.

THE

THE ports generally called the Cinque-ports, with their members, were bound by their tenure to supply the king with fifty-seven ships, containing twenty-one men and a boy in each ship, for fifteen days once in the year at their own expence, if their service was required. When the king had occasion for a fleet, he issued his mandate to the ports to fit out the number of ships they were bound to supply *. If these were insufficient, the mandates were more extensive; they frequently being to arrest indiscriminately all ships of more than a certain burthen †. Officers were authorized to inspect the ships

* A. D. 1393. Claus. 18 Ric. II. m. 34. Rym. tom. VII. p. 784. } Mandate from king Ric. II. to John de Beauchamp, constable of Dover castle, and warden of the Cinque-ports, reciting, "That whereas "the Barons of the Cinque-ports owe us the following annual service when re-"quired, viz. that the said ports and their members should upon 40 days notice "fit out and supply the king with 57 ships, each having a master and 20 men well "armed and arrayed, at their own proper costs for 15 days; at the expiration of "which time the said ships and men to be at our proper charges and pay, so long "as we shall have need of them, viz. the master of each ship to have 6d. the "constable 6d. and each of the other men 3d. *per diem*; as by the tenor of the "charters and liberties granted by our predecessors, and which we have confirmed, it "appeareth. And we having ordained a great naval armament to assemble for our "voyage into Ireland, therefore summon the said Barons to perform the said service "by sending their said ships and mariners, well arrayed, to attend us at Bristol, &c.

A. D. 1412. Claus. 13 Hen. IV. m. 18. Rym. tom. VIII. p. 733. } A like summons.

A. D. 1421. Claus. 9 Hen. V. m. 24. Rym. tom. X. p. 108. } A like summons.

† OUR public records contain innumerable instances of these mandates: the following will be sufficient to refer to upon this occasion.

Pat. 3 Hen. V. p. 1. m. 33. d. Rymer, tom. IX. p. 218. } THE king directed Nicholas Maudyt, his serjeant at arms, to arrest all ships and vessels in every port in the kingdom of the burthen of 20 tuns and upwards, for the king's service.

Pat. 14 Edw. IV. p. 2. m. 16. d. Rymer, tom. XI. p. 839. } THE king commanded all ships and vessels of the burthen of 16 tuns and upwards to be arrested for his service.

so procured, and to see that they were sufficiently supplied with men and necessaries in proportion to their tonnage. A curious instrument, issued for that purpose in the reign of king Edward II. remaining upon record, will assist us in forming a judgement of the manner in which that service was performed. By this instrument* Sir John Devereye, clerk, was appointed surveyor of a fleet ordered to assemble in the west, to see that they were furnished with anchors, cables, and other necessaries; and that every ship was sufficiently manned in proportion to its size; *viz.* a ship of 240 tuns with 60 men, of 200 tuns with 50 men, of 160 or 170 tuns with 40 men, of 140 tuns with 35 men, of 120 tuns with 28 men, of 100 tuns with 26 men, and of 60 tuns with 21 men. And that each ship of 180 tuns and upwards should have one master and two constables†, and those of 160 tuns and under, one master and one constable, who were to be included in the number above specified.

IN those times, when ships were intended for fighting, soldiers were put on board them, and the battle was fought with bows and arrows, cross-bows, darts, spears, slings, and other missile instruments. To grapple and board were the chief objects of a naval fight; and when that was effected, the conflict generally became desperate and bloody.

THE fleet of king Edward II. employed in the wars against Scotland, in the fifteenth year of his reign, A. D. 1322, is preserved in a valuable M. S. in the library of our worthy member Thomas Astle, Esq. being the account of Roger de Waltham, keeper of the great wardrobe, from the first of May, in the fifteenth year of Edw. II. to the 19th of October, in the 17th

* Printed in the Appendix, N° I.

† The Constable was probably the director of the engagements.

year

year of the same king, under the head of wages of seamen, and freightage of ships in the king's service: whereby it appears that the king had eleven ships of his own in that service, manned with 379 men, and fifteen other private ships, having on board near 600 men. The names of these ships of the king, with the names of the master, the number of seamen, and the sums paid for their wages, computed at 6d *per* day for the master, and 3d a-day for each man, for the time they were respectively employed, is here given:

THE KING'S SHIPS.

Names of the ships.	Names of the Masters.	N° of Seamen.	Sum paid. l.	s.	d.
La Blithe de Westminster.	Robert Lenys	10	26	11	9
La Squynkyn de Westm'	Thomas Springet	8	19	10	0
La Rose de Westm'	John Brewer	7	19	11	6
La Godale de Westm'	John Fughler	28	24	4	3
La Alianore de Westm'	Roger Catour	38	47	3	0
La Magdalene de Westm'	William Atte Wose	38	38	6	0
La Blithe de Westm'	William Punche	8	15	17	6
La Katerine de Westm'	Theobald de Barton	36	16	11	0
La James de Westm'	John Little	46	43	1	0
La Nicholas de Westm'	Richard Fille	78	28	0	0
Coga Johannis.	Peter Bard.	82	64	1	0

IN the year 1339, 13 Edw. III. * it was ordained in parliament, that, for the safeguard of the sea, the Cinque-ports should supply their quota of ships; and the mariners of the west undertook to set forth 70 sail of ships of the burthen of 100 tuns or more, and to bear the charges thereof as far as they were able; and the ships of Portsmouth of the burthen of 100 tuns and upwards were ordered to assemble at Dartmouth.

* Rot. Parl. vol. II. p. 108.

A LIST

A LIST of the fleet employed by K. Edward III. at the siege of Calais in the 25th year of his reign is extant *. This list preserves to us the number of the king's ships at that time, as well as those supplied by the different sea-ports of the kingdom: several of which have long since fallen into disuse. The king's ships were then 25, carrying 419 mariners, being somewhat less than 17 men to a ship; and the number of the whole fleet was 700 ships, manned with 14151 mariners, which upon the general average was little more than 20 men to a ship.

IN a pardon granted to William of Wickham, bishop of Winchester, 1 Richard II. † it is recited that the said bishop had undertaken to supply king Edward III. in the 50th year of his reign, with three ships, for a quarter of a year; each ship having fifty men at arms and fifty bowmen, at the wages and rewards which the king usually paid: the king to pay the mariners.

Stat. 5 Ric. II. stat. 1. cap. 3.
6 Ric. II. cap. 8.
14 Ric. II. cap. 6.
} ALL these statutes restrain merchandizes from being carried out of, or brought into, the kingdom, except only in *English ships*; provided the owners were satisfied with reasonable gains for the freight thereof. This would consequently greatly encourage the English shipping, and laid the foundation of the famous navigation act which was not completed till the reign of Chares II.

IN 1412 ‡ king Henry IV. complained to the king of Portugal that the ship Thomas, of London, being of the burthen of two hundred tuns, and having a master, a merchant, and a purser (burse-magister) on board, had been violently seized at Lisbon, and the master and crew confined in chains.

* Printed in the Appendix, No. II.
† Rymer, tom. VII. 161.
‡ Ibid. tom. VIII. p. 727.

IN

In a treatise, "On the Policy of keeping the Sea," preserved in Hakluyt's Voyages *, is a chapter called "Another Incident "for keeping the Sea in the Time of the marvellous Warriour "and victorious Prince King Henry the Fifth, and of his great "Shippes;" wherein the rhiming author gives us an account of the ships in that reign, in these words:

"And if I should conclude all by the King
Henry the Fift, what was his purposing
When at Hampton he made the great *Dromons*
Which passed other great ships of all the Commons
The *Trinity*, the *Grace-Dieu*, the *Holy Ghost*,
And other moe, which as now bee lost;
What hope ye was the King's great intent
Of thoo shippes, and what in minde hee meant,
It was not ellis but that he cast to bee
Lorde round about environ of the See.
And when Harflew had her siege about,
There came Carracks horrible, great, and stoute.
In the narrow see willing to abide
To stop us there with multitude of pride
My Lord of Bedford came on and had the cure,
Destroyed they were by that discomfiture, &c."

In 1442, 20 Henry VI. † the commons in parliament stated the necessity of having an armed force upon the sea, and pointed out the number of ships and men that it would be proper to employ for that purpose; viz. *eight ships with fore-stages*, carrying 150 men each; and that there should be attendant upon each ship, a *barge* carrying 80 men, and a *balynger* carrying 40 men, and that four *spynes* or *pinnaces* carrying 25 men each, would be necessary; the whole number of men being 2260; and the

* Vol. I. p. 203. † Rot. Parl. 20 Hen. VI. N° 30. vol. V. p. 59.

 estimated

estimated expences of victualling this fleet for eight months, and the mariners wages for that time, amounted to 6090l. 13s. 4d. The Commons likewise pointed out where these *ships* might be obtained, viz. "At Bristowe, the Nicholas of the Towre, and "Katherine of Burtons. At Dartmouth, the Spanish ship that "was the Lord Puns *, and Sir Phelip Courteney's great ship. "In the port of London two great ships, one called Trinity, "and the other called Thomas. At Hull, a great ship called "Taverners, the name Grace-dieu. At Newcastle, a great ship "called the George." They also state where the *balyngers*, *barges*, and *spynes*, or pinnaces, might be procured.

IN 1449 †, the king, at the request of John Taverner, of Hull, mariner, "who, with the divine assistance and of divers "of the king's subjects, had made a ship as large as a great "carrack or larger, then being in the port of London, granted "that the said ship, by reason of her unusual magnitude, should "be named the *Grace-dieu-Carrack*, and should enjoy certain "privileges in trade."

IN 1455, king Henry VI. ‡ at the request of the king of Sweden, granted a licence for a Swedish ship called the King's Barge, of the burthen of 1000 tuns or under, laden with merchandize, and having 120 persons on board, to come into the ports of England, there to dispose of her lading, and to relade back with English merchandize.

THE inscription on the tomb of William Canning, in Ratcliff church, Bristol, ann. 1474 §, "mentions his having forfeited the "king's peace, for which he was condemned to pay 3000 marks, "in lieu of which sum king Edward IV. took of him 2470 tuns "of shipping; amongst which there was one ship of 900 tuns "burthen, another of 500 tuns, and one of 400 tuns, the rest "being smaller." "Yet (adds the laborious and valuable Ander-

* Q. Poyntz's. † Rymer, tom. XI. p. 258.
‡ Rymer, tom. XI. p. 364 § Anderson's Hist. of Commerce, vol. I. p. 271.

"son,)

" son) although these greater ships had English names, we are " nevertheless in doubt whether we had at that time ships of our " own building in England so large; possibly therefore Canning " might have either purchased or taken them from the Hanseatics, " or from the Venetians, Genoese, Lucccse, Ragusians, or Pisans; " all of whom had ships of even a larger burthen at that time."

In 1478 *, King Edward IV. granted a licence to Robert Alcock, to send an English ship of 240 tuns or under, laden with merchandize (not of the staple of Calais), to Iceland, and there to relade with fish or other goods back to England.

In 1481 †, king Edward IV. in the 20th year of his reign, having occasion to send a naval force against his faithless and antient enemy the king of Scotland, issued his mandate for arresting seamen for manning six ships of his own, and five belonging to other persons. The king's own ships were called the *Grace de Dieu*, the *Mary*, the *Anthony*, the *Great Portingale*, the *Spanyard*, and the *Mary Asse*.

In 1512 ‡, 3 H. VIII. in an indenture made between the king and sir Edward Howard, kt. " admiral chief and general capitayne " of the king's naval force," the names and magnitude of the fleet " then to be rigged, equipped, tackelled, decked, and furnished with " ordenance and artillery necessary and convenient," are preserved, as followeth:

	Tuns.		Tuns.
The Regent of	1000	The Lyon	120
The Mary Rose	500	The Barbara	140
The Peter Pomegranate	400	The George of Falmouth	140
John Hopton's ship	400	The Peter of Fowey	120
The Nicholas Reede	400	The Nicholas of Hampton	200
The Mary John	240	The Martenet	180
The Anne of Grenewich	160	The Genet	70
The Mary George	300	The Christopher Davy	160
The Dragon	100	The Sabyen	120

* Rymer, tom. XII. 94. † Ibid. p. 139. ‡ Ibid. p. 327.

SOON after this the famous ſhip the *Harry Grace a Dieu* was built. Stowe gives us the following account of the occaſion of building this ſhip. "About the month of Auguſt, 1512, (ſays that accu-" rate annaliſt) * the navies of England and France meeting in " Bretaigne Bay fought a cruel battle, in the which the *Regent* or " *Sovereign* of England, and a carrick of Breſt in France, being " grappled together, were burned, and their captains with their " men all drowned. The Engliſh captain was Sir Thomas Knevet, " who had with him Sir John Carew and 700 men. In the " French carrick was Sir Pierce Morgan with 900 men, who " were all burnt or drowned. King Henry, hearing of the " loſs of the *Regent*, cauſed a great ſhip to be made, ſuch a " one as the like had never been ſeen in England, and named it " *Henry Grace de Dieu*." Hall, and other Chronicles of the time, give a ſimilar account of the time and occaſion of building this celebrated ſhip.

In that reign the royal navy of England was ſettled upon a regular and permanent eſtabliſhment; a navy office was erected by king Henry VIII. and we find by an inventory †, taken after the death of that monarch, that the king's ſhips, gallies, and pinnaces, were then encreaſed to 53, containing 6255 tuns, and carrying 7780 men.

THESE authorities apply to the magnitude of the ſhips formerly uſed in this country; as to the form, our proofs are not ſo ſatisfactory. Coins, and the ſeals of admirals and ſea-port corporations, are our principal evidences upon this head. The nobles, the rials, and the angels of our kings from Edward III. to Charles I. incluſive, repreſent the figure of a ſhip on their reverſes; all of which, previous to the reign of Henry VIII. give only one maſt and one ſail. One of the

* P. 490. † Printed in the Appendix, N° IV.

George-

George-nobles of that king (probably ſtruck early in his reign), has likewiſe only one maſt; but another coin of that reign repreſents a ſhip with three maſts. A pattern ſix-angel piece of his ſon Edw. VI. alſo repreſents a ſhip with three maſts clearly diſtinguiſhed.

An original ſeal * of John Holland, Earl of Huntingdon (afterwards Duke of Exeter) admiral of England and Ireland in the reign of Henry VI. in my poſſeſſion, exhibits a ſhip with one maſt, and one ſail, charged with the arms of the admiral. She has a forecaſtle and a ſtern gallery, whereon flags of St. George's croſs are diſplayed, and a pendant is flying at the maſt head. A lantern is ſuſpended as a mark that this was a principal ſhip, from which the ſignals were to be received.

The ſeal of Richard, duke of Glouceſter, as admiral of England in the reigns of Edward IV. and Edward V. was lately exhibited to this Society by our learned Preſident. That ſeal repreſents a ſhip ſomewhat larger in appearance, and more decorated, than that laſt deſcribed. Only one maſt and one ſail however is given; the ſail is ſet, and is charged with the arms of the royal admiral; flags of St. George are flying; and the mark of diſtinction is given by repreſenting a beacon to communicate ſignals.

The ſeals of ſeveral of the incorporated ſea-port towns likewiſe repreſent ſhips of a ſimilar form and conſtruction with thoſe above deſcribed; and not any of them, that I have ſeen, give more than one maſt and one ſail prior to the reign of Henry VIII †.

From theſe facts it may be inferred, that the ſhip antiently uſed in this country was ſmall and inſignificant, and that it gra-

* See the curious hiſtory of the Hoſpital of St. Katharine, lately publiſhed by Mr. Nichols, Plate IV. where this Seal is engraven.

† See the ſeals of Dunwich in Mr. Gardiner's Hiſtory of that town: thoſe of Dover and Feverſham engraved for Mr. Boys of Sandwich and Mr. Jacob: and thoſe of Newtown and Yarmouth, in the Iſle of Wight, in the valuable hiſtory of that iſland.

dually increaſed in ſize as neceſſity and convenience pointed out. The uſe of cannon on ſhip-board would occaſion a great increaſe in the ſize of the ſhip; and the diſcovery of the new world having opened the eyes of Europe to the advantages of commerce and diſtant navigation, neceſſarily required an enlargement of the veſſel, as well for the uſe of the guns as for the convenience of the ſtores and cargoes: we conſequently perceive the gradual progreſs from the ſmall one-maſted veſſel, to the high-built, double-topped, four-maſted ſhip, repreſented in the picture before us.

WHEN cannon were firſt uſed on ſhip-board cannot be preciſely aſcertained; but it is probable they were occaſionally uſed, in ſome ſhape, ſoon after their firſt invention about the middle of the 14th century. Some authorities will aſſiſt us in forming an opinion upon this ſubject *. Cannon were uſed by land at the

* The learned Dufreſne in his Gloſſary gives the following deſcription and authorities upon the ſubject of *guns* and *cannons*.

" *Gunna*; Machinæ bellicæ, ſeu miſſilis ſpecies; vox contracta ex *mango* vel *man-* " *gona* uti opinatur Somnerus." Tho. Walſinghamus, p. 226. " Nec mora, " conſuctis adhibitis inſtrumentis, miſſilibus, ſcil't, quæ vulgus *gunnas* vocant, ter- " ribiliter feriunt." Idem, p. 303. " Et cum lapidibus, lanceis et ſagittis, igne " Græco & miſſilibus, quæ *gunna* vocantur, noſtros ubique repellunt." Ib. p. 374. " Quod cum illi præciſe negarent, intendant *gunnam magnam*, cujus unico jactu de- " jecit partem unius turris."—Ib. p. 398. " Et illic figere vel locare gunnas ſuas " quas Galli *canones* vocant, quibus validius villam infeſtare poſſet." Ex quibus " patet, gunnam eadem fuiſſe machinam bellicam quam noſtri *canonem* vocabant " quaeque Anglis a *gunne* dicitur. Unde neſcio an a *gunnis* dicti ſint *canones*, quaſi *gunnones*."

Ibid. voce *Canones*. " Machinæ bellicæ noſtris *canons*, ſic dictæ, ut quidam vo- " lunt quod cannarum formam referant, ita enim *canones* ſiphones vocant Itali." Tho. Walſingham, in Henry V. p. 398. " Et illic figere *gunnas* ſuas, quas Galli " *canones* vocant, quibus validius villam infeſtare poſſet,"—Continuator Nangij ann. 1356. " Munientes turres baliſtis, garrotis, *canonibus* et machinis, &c." Chronic. MS. Bertrandi du Gueſclin, " pour la ville aſſaillir ordonnerent *canons*."

In

the battle of Cressy in the year 1346 * by the English; and we are told that the Venetians used them at sea about the year 1380 †. In 1386 ‡ certain English ships met with two French ships sailing towards Sluis, which they took and brought into Sandwich. There was found on board those ships a *master gunner*, who before served in the English army at Calais, under Sir Hugh Calverly; "and also (says Hollinshed) divers *great* "*guns* and *engines* to beat down walls, with a great quantity of "powder that was worth more than all the rest."

In the first year of Richard II. § the king directed Thomas Norbury to buy and provide of Thomas Restwold, of London, two great and two lesser engines called *cannons*; 600 stone shot for the same and other engines, and a great quantity of bows and arrows, iron, steel, saltpetre, sulphur, charcoal, and other ammunition for stores to be sent to the castle of Brest.

In 1414, king Henry V. ‖ commanded the collectors of the port of London and other ports, not to suffer any *gunpowder* to be carried out of the kingdom, without the king's special licence.

In 1418 ** the king commanded the clerk of the works of his ordnance to procure labourers for the making 7000 stones for *guns* of different sorts, in the quarries of Maidstone in Kent.

In the same year †† the king commanded the clerk of the works to prepare twelve great carriages for *large guns*, 20 pipes

In computo auxiliorum coactorum pro liberatione Joannis Regis Franc. ann. 1368, in camera computor. Paris. "Guillaume l'Escuier *Maistre des canons du* "*Roy*, que icelui seigneur lui a ordonne estre baille pour querir cent livres d'estoffe "a faire poudre pour quatre *grans canons* qu'il doit faire pour mettre en la garnison "de Harefleu."

* Mezerai. Rapin.

† Camden's Remains.

‡ Hollinshed's Chronicle, vol. II. p. 453.

§ Rot. Franc. 8 Ric. II. p. 2. m. 15.

‖ Claus. 2 Henry V. m. 16.

** Pat. 5 Henry V. m. 4.

†† Ibid. m. 3.

of powder made of the charcoal of willows, and various other articles for the use of the guns.

IN 1474 * king Edward IV. directed all the *bombs*, *canons*, *culverins*, *fowlers*, *serpentines*, and all other *canons* whatsoever; as also powder, sulphur, saltpetre, stones, iron, lead, and other materials fit and necessary for the same canons, wherever found, to be taken and provided for his use, paying a reasonable price for the same.

IN the year 1521 †, was first introduced the use of *hand guns* or *muskets*; in consequence whereof (says Mr. Anderson) in little more than 100 years the practice of bows and arrows in war was laid aside.

IN 1521 ‡ John Owen began to make brass ordnance, as *canons*, *culverins*, and such like; he was the first Englishman (says Stowe) that ever made that kind of artillery in England.

IN 1543, 35 Henry VIII ‖ "the king minding wars with "France, made great preparations and provision, as well of mu-"nitions and artillery, as also of *brass ordinance*, amongst which "at that time one Peter Bawd, a Frenchman born, a gunfoun-"der, or maker of great ordinance, and one other alien called "Peter Van Collen, a gunsmith, both the king's feed men, "conferring together, devised, and caused to be made, certain "*mortar pieces*, being at the mouth from eleven inches unto "nineteen inches wide; for the use whereof the said Peter and "Peter caused to be made certain hollow shot of cast yron stuffed "with fire-work or wildfire, whereof the bigger sort for the "same had screws of yron to receive a match to carry fire kin-"dled, that the fire-work might be set on the fire to break in small "pieces the same hollow shot, whereof the smallest piece, hit-"ting any man, would kill or spoil him. And after the king's

* Pat. 14. Edw. IV. p. 2 m. 16.

† Anderson's History of Commerce, vol. I. p. 351.

‡ Stowe's Chron. 572.

‖ Ibid. p. 584.

" return from Bullen, the ſaid Peter Bawd by himſelf, in the " firſt year of Edward VI. did alſo make certain ordinance of " *caſt yron* of divers ſorts and forms; as fawconet, falcons, mi- " nions, ſakers, and other pieces."

NOTWITHSTANDING theſe authorities are ſufficient to convince us that cannon were uſed on ſhip-board, in ſome manner, ſoon after they were invented, yet it doth not clearly appear when they were firſt uſed in their preſent form. We have repreſentations of ſhips in the reigns of Richard III and Henry VII *, having guns pointed over the tops of their ſides or gunwales; but ſir Joſeph Ayloffe, in his learned deſcription of the paintings at Cowdray † tells us, " that the earlieſt repreſentation of ſhips of " war having *port-holes* for their guns, which he had met with, " was in the valuable picture preſerved at Cowdray of the land- " ing of the Emperor Charles V. at Dover, in the year 1520." It is however certain that the ſhip *Harry Grace a Dieu*, built by king Henry VIII in the 4th year of his reign, had cannon and many port holes.

THIS ſhip varied in its decorations and in the number of its port-holes and guns at different times. She is repreſented in the picture before us as having her ſides and tops ornamented with ſhields charged with the different arms the king uſed, and having only five port holes on each ſide open. In the curious painting preſerved at Cowdray, engraved by this Society, made 25 years after, the ſhields of the arms are not ſhewn, and more port-holes are open; ſhe being then in the act of engaging the enemy. An original drawing of this ſhip preſented to king Henry VIII, in the 38th year of his reign, A. D. 1546, by Anthony Anthony, one of the officers of the ordnance, ſtill preſerved in the Pepyſian library, in Magdalen college, Cambridge ‡ (from

* Cotton. MSS. Julius, E. IV. † Archaeologia, vol. III. p. 267.

‡ This curious book beautifully drawn and written upon vellum, and embelliſhed with gold, is intituled " A Declaration of the Royal Navy of England, " com-

(from an accurate copy of which, made by the ingenious Mr. Kerrich, of that college, the annexed plate XXII. is engraven), represents this ship as carrying more than 80 guns, and having portholes for many more; the shields of arms are all removed except the cross of St. George; banners of different colours are displayed upon the forecastle and main deck; the standard of England is flying at the main-top-mast head, and a great number of pendants of St. George's cross are suspended at the different masts by way of ornament. A particular state of the guns, ammunition, and stores of every kind belonging to this ship at that time, is printed in the Appendix, No. III from the above-mentioned valuable book. These three authorities however concur in representing the form of this ship to be the same, although they differ somewhat in the ornaments and decorations.

THERE is an engraving of a ship said to be of the Great Harry from an original of Hans Holbein, published by T. Allen, 1756, which differs so widely from the above authorities that it seems apparent they could not be meant to represent the same ship. The prow and the round towers on the forecastle, the main deck, and the stern gallery of the ship in Allen's print vary the form so essentially as to destroy any similarity between that ship and those above spoken of, and make it highly probable that his engraving was made from a drawing of a date subsequent to the reign of Henry VIII. He has not told us where his original is now preserved; but there is one circumstance which, if he has followed his painting faithfully, is decisive upon the point against him; namely, that the supporters of the royal arms on the stern of the ship in his print are a lion and a unicorn; whereas it is well known that the unicorn was not introduced

" composed by Anthony Anthony, one of the officers of the ordnance, and by him " presented to king Henry VIII. an. regni 38. Dni. 1586, in three parchment " rolls, containing, roll 1st shyppes; 2d galliasses; 3d pynasses and rowe largys."

These

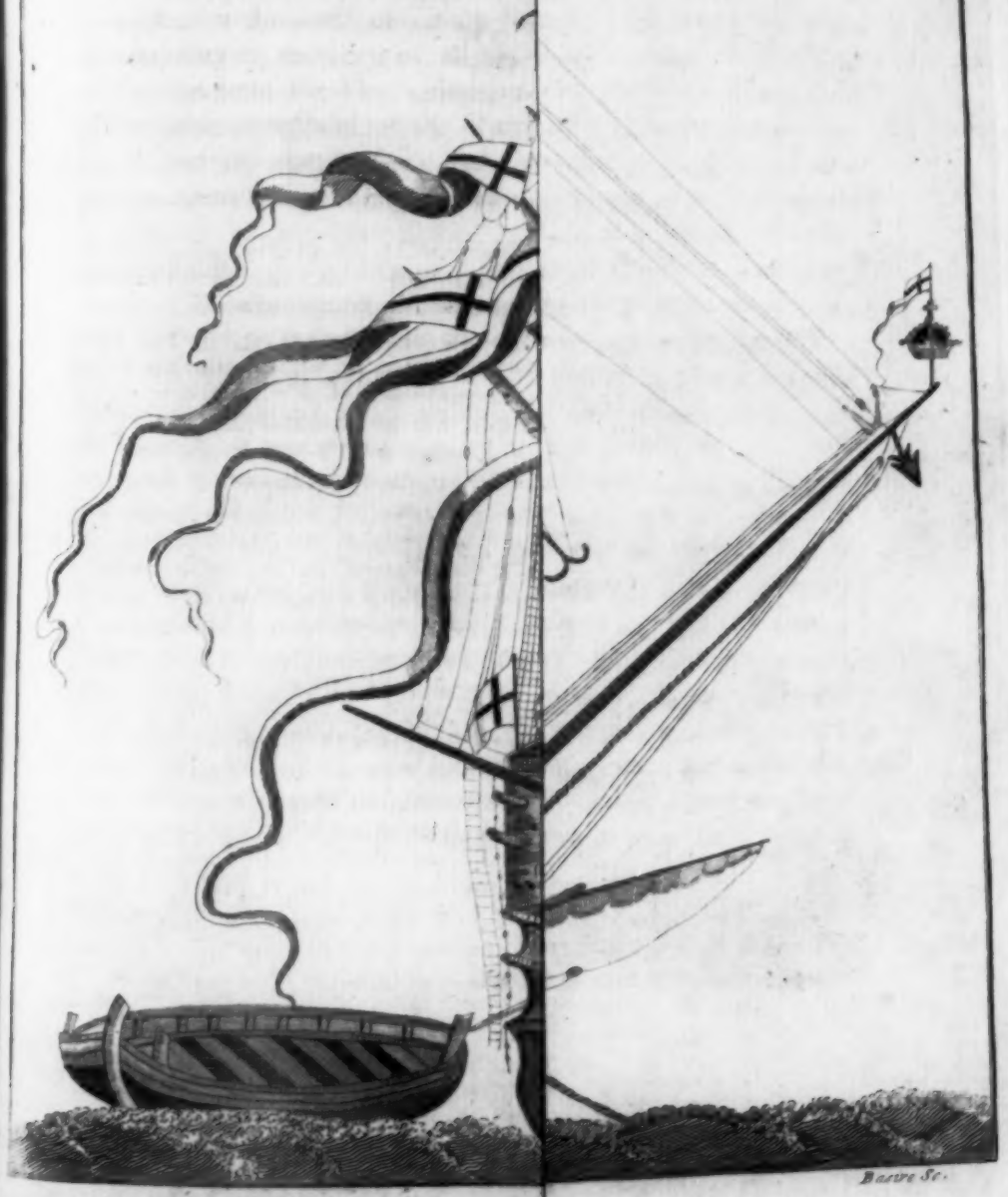
The Ship HARRY GRACE Cambridge. N°. 2991.

Vol. VI. Pl. XXII. p. 208.

Tunnage....1000.

MEN

Soldiers	349	700
Mariners	301	
Gunners	50	



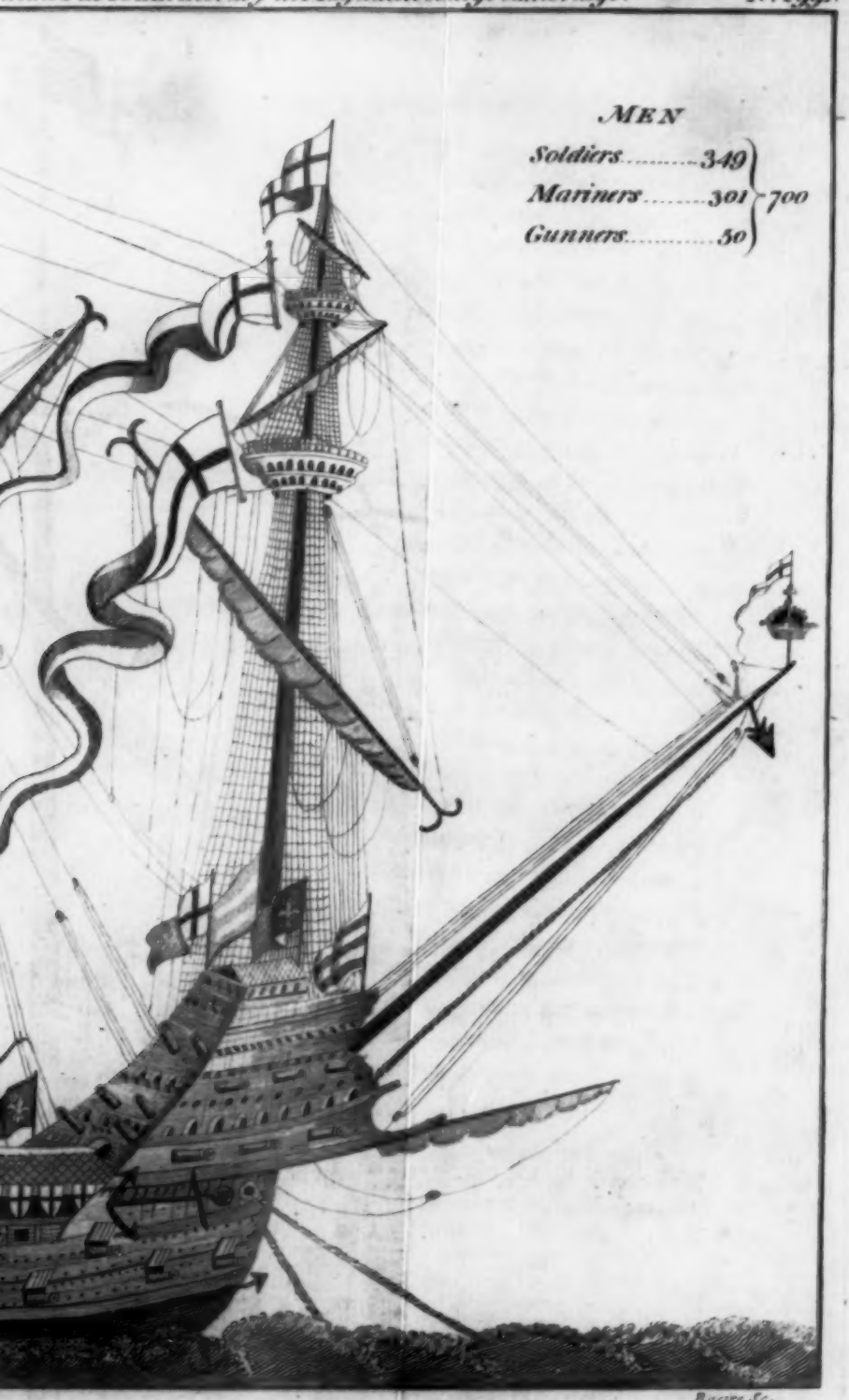
Basire Sc.

The Ship HARRY GRACE a DIEU, from an Original Drawing preserved in

Vol. VI. Pl. XXII. p. 208.

Tunnage .... 1000.

in the PEPYSIAN Library in Magdalen College Cambridge. N°2991.



Basire Sc.

troduced as a ſupporter of the royal arms earlier than the reign of king James I.*

THIS famous ſhip being at Woolwich, on the 27th of Auguſt, 1553, the firſt year of queen Mary, by the careleſſneſs of the mariners took fire, and was totally conſumed.

SOON after the death of Henry VIII. a commiſſion iſſued for an inventory to be taken of all his effects of every kind: a liſt of the names of the king's ſhips and veſſels then in being, together with an account of the tunnage, the ſtores and ammunition of every particular ſhip, and the number of men carried by each of them, being thereupon returned, is preſerved in Mr. Bran-

Theſe rolls were kept in the Royal Library until the year 1680, when king Charles II. preſented the firſt and third of the rolls to Samuel Pepys, eſq, then ſecretary to the Admiralty; the ſecond roll being afterwards found was remaining in 1690 in the Royal Library at St. James's, which library was given by King George II. to the Britiſh Muſeum; but this roll probably did not accompany that collection, it not being now to be found in that valuable repoſitory of uſeful knowledge.

* IT is not improbable, from this circumſtance, that the ſhip engraved by T. Allen was a ſhip of king James I. a deſcription of one of which is thus given in Stowe's Chronicle †. "This year, 1610, the king builded "a moſt goodly ſhippe for warre, the keele whereof was an hundred and "fourteen foote long, and the croſſe beam was forty foure foote in length; ſhe will "carry threeſcore and foure pieces of great ordinance, and is of the burden of 1400 "tunne. This royal ſhip is double built, and is moſt ſumptuouſly adorned within "and without with all manner of curious carving, painting, and rich gilding, be-"ing in all reſpects the greateſt and goodlieſt ſhip that ever was builded in Eng-"land; and this glorious ſhip the king gave unto his ſon Henry prince of Wales; "and the 24th of September the king, the queen, the prince of Wales, the duke "of York, and the lady Elizabeth, with many great lords, went unto Woolwich "to ſee it launched; but becauſe of the narrowneſs of the dock it could not then "be launched; whereupon the prince came the next morning by three of the "clock, and then at the launching thereof the prince named it after his owne "dignity, and called it *The Prince.* The great workmaſter in building this "ſhip was Maſter Phynies Pet, ſome time Maſter of Art of Emanuel colledge, "Cambridge."

† P. 996.

der's valuable MSS. abovementioned, and is from thence hereto subjoined, Appendix, N° IV.

THE manner of building ships at the period of time we have been speaking of, was probably borrowed from the Venetians, the then great naval power in Europe; the vast height of the ship above the water's edge, the great length of the masts and the ornaments and decorations over the whole, seeming to be much more adapted to the stillness of the Adriatick and the Mediterranean seas, than to the rough boisterous ocean of the northern parts of Europe.

I OUGHT to apologize for having taken up so much of the time of the Society, but the subject appeared to me to be curious and interesting; and if the authorities I have here collected will tend to throw any lights upon the antient state of the English navy, or be the means of inducing gentlemen of greater practical knowledge than myself to investigate that obscure subject, the pains I have taken in making these researches will be amply compensated.

APPEN-

APPENDIX, N° I.

Forma de providenciis, &c. pro passagio apud Plymmuth in Vascon' faciend' p Johem Devery *.

LA FORME coment Sire Johan Devery clerc q'est assigne pur hastier et surveer la Navye q'est mandez devenir a Plymmuth a les Uttaves de la Trinite pschein avenir pur les busoignes ñre Seignur le Roi vers la Duchee de Guyenne se doit port' et aver en meisme le busoigne. Primerement il doit aler a Suthampton, et de illoeques devers le West as touz les portz ou le niefs serront mandez, a surveer qe les niefs qe sont mandez soient prestes et assignez pur cele busoigne des pluis suffisantez qe purront estre trovez dedeinz les portz a ce nomez; et que chescune de celes niefs eit son attil bien et plein, come des auncres, cordes, et cables, et autres choses necessaries et covenables; et qe totes celes niefs soient garnyes de bonez gentz en la forme souz escripte; c'est assevoir, Qe une nief q'est de 240 toneaux, avera 60 homes mariners; une nief de 200, 50 homes; une nief de 160 ou 180, 40 homes; une nief de 140, 35 homes; une nief de 120, 28 homes; une nief de 100, 26 homes; une nief de 80, 24 homes; et une nief de 60, 21 homes. Et fait a remembrer, Qe chescune nief de 180 toneaux, et de pluis graunt charge, avera un mestier et deus conestables, qe serront contenuz dedeinz le numbre des mariners; et chescune nief de 160 toneaux, et de meyndre charge, avera une mestier et un conestable, qe serront contenuz dedeinz le numbre des mariners. Item le dit Sir Johan se doit aviser od les bones gentz des Portz, ou il vendra a pluis pres q'il purra queux pountz et clayes et rasteux et autres choses serront covenables et busoignables pur chescune neef solonc ce qe eles soient grauntz et petites; et q'eles se deveront charger ou de gentz ou des chivaux, si que le dit Sire Johan puisse aviser les Viscontes q̃ sont chargez de purveer totes choses qe serront covenables et busoigna-

* Rot. Pat. 17 Edw. II. m. 13.

bles pur les dites neef. Item le dit Sire Johan doit exciter et charger les Viſcontes et touz ceux qe ſe devient meller de ceſte buſoigne, de la haſter par totes les covenables maneres q'ils ſaveront ou purront, ſi qe les dites neefs bien apparaillies at adreſcees ſoient as dites jour et lieu en totes maneres preſt et apparaillies a cygler; et doit le dit Sire Johan aviſer p ſes lres le Chauncellier ou le Treſorier de l'eſploit q'il avera fait ſi ſovent com il purra et meſtier ſerra, et de defaute ſi qu'il trouaſt en miniſtre ou autre ſi qe eux puiſſent ordeiner et adreſcer la buſoigne et les defautes, ſi nulles ſoient, ſolonc ce q'il verront qe ſoit au profit le Roi. Et fait aſſavoir qe les mariners ſerront paie de lour gages devant la mayn pur 20 jours pſcheinz ſuanz apres qe eux comenſent de cygler playn jorney; de quels temps les Viſcontes des leus ou le dit Johan certefient le Chauncellier ou le Treſorer a tiel temps qe eux puiſſent ordeyner le payement. Et auxint certefient les avanditz Chauncellier ou Treſorer des nounes et des meſtiers des nieſs, et de numbre des mariners, et de quel Havene de els ſoient, pur pluis certeynement payement faire, et meilleur purveance faire de leur vitailles en temps.

APPEN-

APPENDIX, N° II.

A Roll of King Edward the Third's Fleet before Calais. Extant in the Great Wardrobe *.

The South Fleet.

The King's	Ships	25	Winchelsea,	Ships	21
	Mariners	419		Mariners	596
London,	Ships	25	Weymouth,	Ships	15
	Mariners	662		Mariners	263
Milford,	Ships	2	Lyme,	Ships	4
	Mariners	24		Mariners	62
Hoo,	Ships	2	Seaton,	Ships	2
	Mariners	24		Mariners	25
Maidstone,	Ships	2	Sydmouth,	Ships	3
	Mariners	51		Mariners	62
Hope,	Ships	2	Exmouth,	Ships	10
	Mariners	39		Mariners	193
New Hyth,	Ships	5	Teymouth,	Ships	7
	Mariners	49		Mariners	120
Margate,	Ships	15	Dartmouth,	Ships	31
	Mariners	160		Mariners	757
———	Ships	2	Portsmouth,	Ships	5
	Mariners	22		Mariners	96
Feversham,	Ships	22	Plymouth,	Ships	26
	Mariners	504		Mariners	603
Dover,	Ships	16	Loo,	Ships	20
	Mariners	336		Mariners	315
Wight,	Ships	18	Yalm,	Ships	2
	Mariners	220		Mariners	47

* Hackluyt's Voyages.

Foy,

Foy,	Ships	47	Limington,	Ships	9
	Mariners	770		Mariners	159
Briſtol,	Ships	22	Pool,	Ships	4
	Mariners	608		Mariners	94
Tinmouth,	Ships	2	Wareham,	Ships	3
	Mariners	25		Mariners	59
Haſtings,	Ships	5	Swanzey,	Ships	1
	Mariners	96		Mariners	29
Romney,	Ships	4	Ilfra Combe,	Ships	6
	Mariners	65		Mariners	96
Rye,	Ships	9	Padſtow,	Ships	2
	Mariners	156		Mariners	27
Hieth,	Ships	6	Polerman,	Ships	1
	Mariners	122		Mariners	60
Shoreham,	Ships	20	Wadworth,	Ships	1
	Mariners	329		Mariners	14
Seaford,	Ships	5	Caerdiffe,	Ships	1
	Mariners	80		Mariners	51
Newmouth,	Ships	2	Bridgewater,	Ships	1
	Mariners	18		Mariners	15
Hammowle Hook,	Ships	7	Caermarthen,	Ships	1
	Mariners	117		Mariners	16
Hoke,	Ships	11	Cailcheſworth,	Ships	1
	Mariners	208		Mariners	12
Southampton,	Ships	21	Mulbrook,	Ships	1
	Mariners	576		Mariners	12

Total of the South Fleet Ships 493
Mariners 9630

The North Fleet.

Bamburg,	Ships	1	Hull,	Ships	16
	Mariners	9		Mariners	466
Newcaſtle,	Ships	17	York,	Ships	1
	Mariners	314		Mariners	9
Walwich,	Ships	1	Ravenſpurgh,	Ships	1
	Mariners	12		Mariners	27
Hartlepool,	Ships	5	Woodhouſe,	Ships	1
	Mariners	145		Mariners	22

Stolkhithe,

Stolkhithe,	Ships	1	Geford,	Ships	13
	Mariners	10		Mariners	303
Barton,	Ships	3	Harwich,	Ships	14
	Mariners	30		Mariners	283
Sunfleet,	Ships	1	Ipswich,	Ships	12
	Mariners	11		Mariners	239
Saltfleet,	Ships	2	Mersey,	Ships	1
	Mariners	49		Mariners	5
Grimsby,	Ships	11	Brickelsea,	Ships	6
	Mariners	171		Mariners	61
Wainfleet,	Ships	2	Colchester,	Ships	5
	Mariners	49		Mariners	90
Wrangle,	Ships	1	Whitbanas,	Ships	1
	Mariners	8		Mariners	17
Lynn,	Ships	16	Malden,	Ships	2
	Mariners	382		Mariners	32
Blackney,	Ships	2	Derwen,	Ships	1
	Mariners	38		Mariners	15
Scarborough,	Ships	1	Boston,	Ships	17
	Mariners	19		Mariners	361
Yarmouth,	Ships	43	Suinhumber,	Ships	1
	Mariners	1075		Mariners	32
Dunwich,	Ships	6	Barton,	Ships	5
	Mariners	102		Mariners	91
Orford,	Ships	3			
	Mariners	62			

Total of the North Fleet Ships	217
Mariners	4521
Total of all the English Fleet Ships	700
Mariners	14151

APPEN-

APPENDIX, N° III.

Furniture of the *Harry Grace de Dieu*, from the Original MS. in the Pepysian Library in Magdalen College, Cambridge.

Gonnes of Brasse.		Gonnes of Yron.	
Cannons - - -	IIII	Port Pecys - - -	XIIII
Di. Cannons - -	III	Slyngs - - -	IIII
Culveryns - - -	IIII	Di. Slyngs - - -	II
Di. Culveryns - -	II	Fowlers - - -	VIII
Sakers - - -	IIII	Baessys - - -	LX
Cannon Perers - -	II	Toppe peces - -	II
Fawcons - - -	II	Hayle Shotte Pecys -	XL
		Hand Gonnes complete -	C

Gonne Powder.	Lasts.	Shotte of Yron.	
		For Cannons - -	C
Serpentyn Powder in Barrels	II	For Di. Cannons - -	LX
Corn Powder in Barrels -	VI	For Culveryns - -	CXX
		For Di. Culveryns - -	LXX
		For Sakers - - -	CXX
		For Fawcons - - -	C
		For Slyngs - - -	C
		For Di. Slyngs - -	L
		Crosse barre Shotte - -	C
		Dyce of Yron for Hayle Shotte - - -	IIII^{m}

Shotte of Stoen and Leade.

For Canon Perer -	lx
For Porte Pecys - -	ccc
For Fowlers	c
For Toppe Pecys - -	xl
For Baessys Shotte of Leade	ii^{m}

Munycions.

Pych hamers - -	xx^{ti}
Sledgys of Yron -	xii
Crows of Yron - -	xii
Comaunders - -	xii
Tampions - - -	v^{m}
Canvas for Cartowches	i quar.
Paper Ryal for Cartowches	vi

Arrowes, Morry Pycks.	
Byllys, Daerts for Toppys.	
Bowes, Boweestryngs.	
Bowes of Yough -	v^{c}
Bowe Stryngs	x Grocys.
Morrys Pykes - -	cc
Byllys	cc
Daerts for toppis iii Doussens	ix

Habilliments for Warre.

Ropis of Hempe for wolyng and brechyng - -	x Coyll.
Naylis of sundere Sorts	i^{m}
Baggs of Ledder -	xii
Fyrkyns with Purlys	vi
Lyme Potts -	x Douls.
Spaer Whelys -	iiii Payer
Spaer Truckells -	iiii Payer
Spaer extrys -	xii
Shepe Skynnys -	xxiiii
Tymber for Forlocks	c Feet.

APPENDIX, N° IV.

The Names of all the King's Majesty's Shippes, Galleys, Pynnasses, and Rowbarges; with their Tonnage and number of Soldiers, Mariners and Gunners; as also the Places where they now be.

5 Jan. Anno R. R. Ed. VI. primo.

Shippes at Wolwidge.

THE *Henry Grace a Dieu*, 1000 tons. Souldiers 349. Marryners 301. Gonners 50. Brass Pieces 19. Iron Pieces 103.

At Portsmouth.

	Tons.	Soldiers, &c.	Brass Pieces.	Iron Pieces.
The Petir	600	400	12	78
The Mathewe	600	300	10	121
The Jesus	700	300	8	66
The Pauncy	450	300	13	69
The Great Barke	500	300	12	85
The Lesse Barque	400	250	11	98
The Murryan	500	300	10	53
The Shruce of Dawske	450	250		39
The Cristoffer	400	246	2	51
The Trynytie Henry	250	220	1	63
The Swepe Stake	300	230	6	78
The Mary Willoughby	140	160		23

Gallies at Portesmouth.

T' Anne Gallant	450	250	16	46
The Sallamander	300	220	9	40
The Harte	300	200	4	52
The Antelope	300	200	4	40

The

	Tons.	Soldiers, &c.	Brass Pieces.	Iron Pieces.
The Swallowe	240	100	8	45
The Unycorne	240	140	6	30
The Jeannet	180	120	6	35
The Newbarke	200	140	5	48
The Greyhounde	200	140	8	37
The Teager	200	120	4	39
The Bulle	200	120	5	42
The Lyone	140	140	2	48
The George	60	40	2	26
The Dragone	140	120	3	41

Pynnasses at Portesmouth.

The Fawcone	83	55	4	22
The Blacke Pynnes	80	44	2	15
The Hynde	80	55	2	26
The Spannyshe Shallop	20	26		7
The Hare	15	30		10

Row-barges at Portesmouth.

The Sonne	20	40	2	6
The Cloud in the Sonne	20	40	2	7
The Harpe	20	40	1	6
The Maidenheade	20	37	1	6
The Gellyflowre	20	38		
The Ostredgesether	20	37	1	6
The Roose Slipe	20	37	2	6
The Flower de lewce	20	43	2	7
The Rose in the Sonne	20	40	3	7
The Port quilice	20	38	1	6
The Fawcon in the fetherlock	20	45	3	8

Deptford Strande.

The Graunde M[r]	450	250	1	22
The Marlyon	40	50	4	8

	Tons.	Soldiers, &c.	Brass Pieces.	Iron Pieces.
The Galley Subtill, or Roo Galley	200	250	3	28
The Brickgantyne	49	44	3	19
The Hoyebarke	80	60		5
The Hawthorne	20	37		
In Scotland.				
The Mary Hamborow	400	246	5	67
The Phœnix	40	50	4	33
The Saker	40	50	2	18
The Doble Roose	20	45	3	6

Total Number of Ships, &c.	Tons.	Nombre of Men.
53	6255	Soldiers 1885
		Maryners 5136
		Gonners 759
		7780

XXV. *On*

XXV. *On the Cubical Contents of the* Roman Congius. *In a Letter from* Henry Norris, *Esq.*

Read July 5, 1781.

DEAR SIR,

I HAVE the pleasure of your sentiments on the little Essay I made to ascertain the cubical contents of the Roman Congius, a copy whereof, in which I have set my name as author, is herewith transmitted to you; and if it may be thought worthy the notice of the Antiquarian Society, do request the favour of you to convey it to them.

Dr. Bernard, in his treatise of Weights and Measures, speaks very highly of Mr. Greaves, *accuratissimus indagator*, yet does not follow him, either in the measure of the standard Roman foot, or the weight of the pounds inscribed on the Congius.

Mr. Greaves's account of his measuring the Colotian foot on the monument of Cossutius, and comparing it with that inscribed on a marble in the capitol, and that he found them both to agree most exactly; and that they agreed also with some very perfect antient brass feet found among the ruins of old Rome, as well as with the marble squares in the pavement of the Pantheon; from all these concurring circumstances he gives his opinion, that the Colotian foot is the true Roman standard foot, 967 thousand parts of the English foot; yet the doctor takes it

to

to be 970, against all the aforegoing evidence to the contrary. So also contrary to clear evidence, as it seems to me, the doctor does not allow those pounds inscribed on the Congius to be standard Roman pounds, but pounds of lighter gravity, which he calls Vespasian pounds.

THIS put me on examination, to discover where truth lay, as far as figures would lead thereto. The result you have herewith. If it tends to establish it, it seems common justice only to the memory of Mr. Greaves to communicate it to the Gentlemen of the Antiquarian Society, which I request you to do; and am,

Dear SIR,

Woodford, Essex,
April 4, 1781.

Your sincere Friend and Servant,

HENRY NORRIS.

AN ESSAY, to ascertain the cubical contents of the Roman Congius; deduced from those particulars which the late Mr. John Greaves (Astronomical Professor at Oxford) on his examination thereof in 1639, hath given us in his discourse on the Roman foot and Denarius. Republished in 1737, by the late Rev. Dr. Birch. By Henry Norris.

IN order thereto, it is necessary to state the facts whereon the deductions are founded.

FROM Mr. Greaves's accurate examination it seems quite clear that the true standard Roman foot is equal to 967 thousand parts of the standard English foot. Of course,

12 Roman Inches are equal to 11,604 English inches, and

12 English Inches are equal to 12,409 Roman inches; for, as 907 : 1000 : : 12 : 12,409 Roman inches. Consequently, a cube

cube whose sides consist of 12,409 Roman square inches, must be equal in magnitude to another cube, whose sides consist of 12 English square inches; and as their magnitudes are equal, so also must be their cubical contents.

The cube of 12,409 Roman inches is 1910,778 Roman cubic inches, and the cube of 12 English inches is 1728 English cubic inches. Then 1910,778 Roman cubic inches are equal to 1728 cubic inches English.

By Mr. Greaves's experimenting, it seems very clear, that the standard Roman pound of 12 ounces was equal to 5256 Troy grains English.

In the Philosophical Transactions we find that 1728 cubic inches English of water, have been experimented to weigh 1000 ounces avoirdepois, and that the avoirdepois ounce is equal to 437½ troy grains. Then 1728 cubic inches English of water weigh 437500 troy grains English. And as 1728 English cubic inches are equal to 1910,778 Roman cubic inches, so 1910,778 Roman cubic inches of water must weigh 437500 troy grains English, which, divided by 5256, gives 83,238 Roman pounds for the weight of water.

These facts being stated, shall now proceed.

The Roman congius, by its inscription, held 10 Roman pounds of water. Then as 83,238 Roman pounds : 10 Roman pounds : : 1910,778 Roman cubic inches : 229,556 Roman cubic inches for cubical contents of the Congius in Roman measure. And, as 1910,778 Roman cubic inches : 229,556 Roman cubic inches : : 1728 English cubical inches : 207,597 English cubical inches for cubical contents of the Congius in English measure; and comparing the said deduction with Mr. Greaves's account of measuring the Congius with millet grain, by English quarts, pints, and fractional parts of a pint, the difference is so

small,

ſmall, as ſerves rather to illuſtrate the deduction by the total weight of water.

HE ſays, the Congius contained 3 quarts 1 and $\frac{1}{2}$ pints of our wine meaſure, and of our corn meaſure 3 quarts and about $\frac{1}{4}$ of of a pint; but he does not ſay what were the cubical contents of the wine and the corn gallons, by which he meaſured the Congius in 1639.

HOWEVER, we find the legal ſtandards were confirmed in 1688, to be, the wine gallon 231 cubic inches, the corngallon 268,2 cubic inches, commonly called Winchester meaſure, from Henry the Seventh's buſhel. Then, according to our wine meaſure, the Congius was 205,734 cubic inches Engliſh; for as 8 pints: 7 $\frac{1}{2}$ pints:: 231 cubic inches: 205,734 cubic inches Engliſh. But, according to our corn meaſure, the Congius was 206,212 cubic inches Engliſh; for as 8 pints: 6 $\frac{3}{4}$ pints :: 268,2 cubic inches Engliſh: 206,715 cubic inches Engliſh, for cubical contents of the Congius in Engliſh meaſure.

AND farther, if we alſo compare the account given by Mr. Greaves, of Villalpandus's experimenting the weight of water contained in the Congius, to be 10 Roman pounds exact, from whence the ſide of the cube of the Roman Amphora (of 8 Congii) was deduced, and by Mr. Greaves given to be 986 thouſand parts of the ſtandard Engliſh foot, equal to 11,832 inches Engliſh; though this cannot be taken for the true meaſure of the Roman foot, as Villalpandus thought it to be, contrary to better evidence; yet it muſt be admitted, as a good deduction of the ſide of the cube of the Amphora of 8 Congii.

THE Congius was not of a cubic form; but ſuppoſing it had been ſo, as it contained $\frac{1}{8}$ part of an Amphora, the ſide of ſuch cubic Congius, muſt have been juſt half the ſide of the cube of the Amphora. Then the half of 986, is 493 thouſand parts of

the Engliſh foot, equal to 5,916 inches Engliſh; for as 1000 parts : 493 : : 12 inches: 5,916 inches Engliſh, the cube whereof is 207,054 cubic inches for cubical contents of the Congius in Engliſh meaſure, which very nearly agrees with the aforegoing deduction from total weight of water, 207,597 cubic inches Engliſh, which will appear to be the moſt exact cubical contents of the Congius; for as it contained 10 Roman pounds, or 52560 troy grains Engliſh of water, ſay, as 1728 cubic inches Engliſh : 207,597 cubic inches Engliſh : : 437500 troy grains : 52560 troy grains. Whereas 207,054 cubic inches will give but 52423 troy grains. For as 1728 cubic inches : 207,054 cubic inches : : 437500 troy grains : 52423 troy grains; the cubic contents of the Congius in Roman meaſure is before ſhewn to be 229,556 Roman cubic inches, which gives exact 10 Roman pounds weight of water for contents; for as 1910,778 Roman cubic inches : 229,556 Roman cubic inches : : 83,238 Roman pounds : 10 Roman pounds, the weight of water contained in the Congius.

Upon the whole, the fair concluſion ſeems to be, that

In cubical contents,

The Roman Congius was { 229,556 Roman cubic inches.
207,597 Engliſh cubic inches.

The Amphora was { 1836,448 Roman cubic inches.
1660,776 Engliſh cubic inches.

As to Dr. Bernard's ſuppoſition, in his treatiſe 1683, De Menſuris et Ponderibus, about Veſpaſian pounds, of lighter gravity than the ſtandard Roman pound weight; as if the Emperors, by reducing the weight of the ſilver Denarii, had reduced the gravity of their pound weight; common experience contradicts ſuch ſuppoſition; and Mr. Greaves's account of Villalpandus's

experimenting the weight of water plainly disproves the Doctor's supposition, shewing clearly the pounds inscribed on the Congius were of same gravity as the standard pound weight in consular times, when 84 silver denarii were coined out of the pound weight of silver.

The Emperors made their coin lighter, that the same weight of silver should pass for 96 denarii, which in consular times passed for 84 only; an example that has, since that time, been followed also in other nations.

Woodford,
April 5, 1781.

XXVI. *Some*

XXVI. *Some observations on Doctor* Bernard's *cubic contents of the* Roman *Amphora. By* Henry Norris, Esq.

Read November 22, 1781.

HE ſtates the amphora to be a quadrantall or cube of a Roman foot, which he makes equal to 970 thouſand parts of the Engliſh foot, that is, 11,64 inches Engliſh; and gives the amphora to be in cubical contents, 1728 Roman cubic inches, and in Engliſh meaſure to be 1577,098 Engliſh cubic inches.

IF the doctor had attended to and examined the two experiments, made different ways; the one made by Villalpandus, to deduce the ſide of the amphora's cube from the weight of water it contained, and ſhow its cubical contents in Roman meaſure; the other made by Mr. Greaves, to find how many wine pints or corn pints, Engliſh meaſure, of millet grain, were contained in the Roman congius, the doctor might have diſcovered that the cubical contents he gives could not be right either in Roman or the Engliſh meaſure.

VILLALPANDUS's experiment, by weight of water contained in the amphora, deduces the ſide of its cube to be 986 thouſand parts of the Engliſh foot. The doctor ſtates it 970, which he calls a Roman foot of 12 Roman inches, for the ſide of the cube.

Now taking the doctor's Roman foot 970, if we ſtate, as the doctor's ſide of the cube, 970 is to, 986 Villalpandus's ſide of

 the

the cube, ſo muſt 12 Roman inches be to 12,198 Roman inches for the real ſide of the cube of the amphora.

THE cube of 12 inches is 1728 Roman inches as the doctor ſtates it, but the cube of 12,198, is 1814,955 Roman cubic inches for cubic contents of the amphora. This ſhows the doctor's ſtatement to be ſhort of the real quantity of Roman cubic inches.

AND this is farther confirmed by the other experiment of Mr. Greaves in meaſuring the Roman congius with millet grain, and finding it to be 7¼ Engliſh wine pints, or 6$\frac{1}{6}$ Engliſh corn pints, and as 8 congii made an amphora, then the amphora contained 57 Engliſh wine pints, or 49⅓ Engliſh corn pints.

OUR wine gallon of 8 pints is 231 cubic inches Engliſh, and our corn gallon is 268,2 cubic inches Engliſh in contents. Then ſay as 8 pints : 57 :: 231 cubic inches: 1645¾ cubic inches for cubic contents of the amphora in Engliſh wine meaſure, and by our corn meaſure, ſay as 8 pints : 49⅓ :: 268,2 cubic inches : 1653⅓ cubic inches for cubic contents of the amphora in Engliſh corn meaſure.

FROM theſe meaſurements of the amphora with millet grain, particularly the corn meaſure, the cubical contents of the amphora by Villalpandus's experiment is illuſtrated; for by his deduction it is 1656,432 Engliſh cubic inches, for as 1000 parts : 986 :: 12 inches : 11,832 Engliſh inches for ſide of the amphora the cube whereof is 1656,432 Engliſh cubic inches, and by our corn meaſure it is 1653,875 Engliſh cubic inches.

THESE obſervations ſhow the doctor to be miſtaken in his given quantity for cubical contents of the amphora, both in Roman inches and in Engliſh inches.

THE doctor does allow the ſtandard Roman pound to be equal to 5256 troy grains as Mr. Greaves found it to be, but though Mr. Greaves ſhews clearly that the inſcription on the congius

congius of 10 pounds was ſtandard Roman pounds, yet the Doctor does not allow that, but calls them Veſpaſian pounds of lighter gravity; for had he admitted them to be ſtandard pounds, the cubic contents he aſſigns to the amphora of 1577,098 Engliſh cubic would not give the 80 Roman ſtandard pounds weight of water which the amphora did contain. He ſays the amphora held of Roman pounds 76,08, but of Veſpaſian pounds (*ut jam diximus*) 80 pounds water. Now as he allows the Roman pound to be equal to 5256 troy grains Engliſh, it is plain he makes his Veſpaſian pound to be but 4998,456 Engliſh troy grains.

And although it clearly appears from Mr. Greaves that the ſtandard Roman foot was but 967 thouſand parts of the Engliſh foot, yet the Doctor gives it 970, and he gives that for the ſide of the cube of the amphora, although the deduction by weight of water and the meaſurement with millet grain, prove it to be greater.

Taking for granted that the amphora (upon mere aſſertion and without proof) was a cube of a Roman foot as the Doctor has done; there was no other way of getting out of the difficulty, but the way he has taken to ſtate the Roman foot at 970, and to ſuppoſe a Veſpaſian pound of 4998,456 troy grains. Yet even that does not remove a main difficulty; for as he ſtates the amphora to be 1577,098 Engliſh cubic inches, conſequently the congius ſhould be but 197,137 cubic inches, whereas the meaſurement with millet grain by Mr. Greaves as before obſerved ſhews the congius to contain $6\frac{1}{6}$ pints of our corn meaſure, conſequently the cubic contents of the congius muſt be 206,212 Engliſh cubic inches, and by our wine meaſure it contained $7\frac{1}{8}$ wine pints which gives 205,734 cubic inches Engliſh for its contents, as ſtated in my former paper. The Doctor in his account of the congius does not give the cubical

cubical contents of it, probably becauſe it was not of a cubic form, but by his contents given of the amphora, it is plain it ſhould have been 197,137 cubic inches, and by Mr. Greaves's meaſurement with millet it is more plain that the Doctor's account cannot be right, as the congius really was of greater capacity by about 9 cubic inches, or $\frac{1}{11}$ part. So that in every way of examination it appears that the Doctor's ſtatement muſt be miſtaken. But farther, Mr. Greaves cauſed an exact cube to be made to the ſize of 967 thouſand parts of our Engliſh foot, that is 11,604 inches Engliſh, the cube whereof is 1562,511 cubic inches Engliſh, and this cubic veſſel would not contain more than 7¼ congii, whereas the amphora ſhould hold 8 congii, this proves a cube of that dimenſion to be ſmaller than the amphora was.

Dr. Bernard gives the ſide of the amphora at 970 thouſand parts of our foot, that is 11,64 inches Engliſh, the cube whereof is 1577,098 cubic inches, which will not hold 8 congii, for as 1562,511 : 1577,098 :: 7,500 congii : 7,570 congii. This proves alſo a cube of Dr. Bernard's dimenſion would not contain 8 congii, therefore could not be the cube of the amphora.

According to Villalpandus's experiment the ſide of the amphora's cube was 986 thouſand parts of our foot, that is 11,832 inches, the cube whereof is 1656,432 Engliſh cubic inches; a cube of this dimenſion will hold 8 congii very nearly, for as 1562,511 : 1656,432 :: 7,500 congii : 7,950 congii. But taking the cubic contents of the amphora, as ſtated or ſhewn to be by my former paper, 1660,776 cubic inches Engliſh; a cube of that ſize will hold 8 congii more nearly, for as 1562,511 : 1660,776 :: 7,500 congii : 7,971 congii. Thus the cubical contents of the amphora is proved to be 1660,776 Engliſh cubic inches, if figures may be relied on to ſpeak truth.

XXVII. *Sequel*

XXVII. *Sequel to the Obſervations on Ancient Caſtles.* *By* Edward King, *Eſq.*

Read January 17, 1782.

To the Rev. Doctor Milles, *Dean of* Exeter, *Preſident of the Society of Antiquaries.*

SIR,

PERMIT me now to communicate to the Society of Antiquaries, the ſequel of ſuch obſervations as I have had an opportunity to make with regard to the ſtructure of ancient caſtles; a ſubject, which, however ill I may have ſucceeded in treating of it, appears to me capable of throwing conſiderable light on the hiſtory of our country; and therefore I cannot but ſtill endeavour to make every effort in my power to elucidate it; wiſhing my attempts to be a means of exciting others to make more ſucceſsful enquiries.

I DID not venture to lay my firſt concluſions before the Society, till a variety of repeated obſervations had aſſured me I was right in my general outlines; and in no danger of ſubſtituting raſh conjectures, and haſty ſurmiſes, in the room of ſolid ſatisfactory deductions: and I preſume, on the preſent occaſion,

to add these papers, in consequence only of that full conviction of the truth of the remarks they contain, which long experience, repeated investigation, and a patient perseverance in an unbiassed attention to proper researches, has authorized me to adopt.

FOR some time, I thought it would be impertinent to add more on a subject, which to many persons might appear trivial; and therefore I suppreſt some additional observations I had made on the castle at Canterbury, on a second more minute inspection, (when I had the assistance of workmen, and ladders, to examine that building with much more accuracy,) although they tended to confirm, still more strongly, all that had been advanced in my former paper. And I forbore also to give any answer to some few objections, that had occurred to persons not fully acquainted with these kind of researches. But in the course of repeated surveys which I continued to make merely for my own satisfaction, so much fresh matter has come to light, tending to illustrate ancient manners; so many strong confirmations of my former observations have occurred; and there appeared so many additional instances of ancient ingenuity, caution, and skill, deserving of notice, though employed on modes of defence and preservation, which (from the unavoidable change of customs and corresponding ideas) are already become quite obsolete; that I could no longer forbear endeavouring to preserve the remembrance of them, by the assistance, and under the protection of a SOCIETY, instituted to transmit such memorials to future ages; when most probably, from the present decaying state of these structures, there can be no other means of obtaining information concerning these matters, nor any other opportunity afforded of becoming acquainted with many curious facts necessary to preserve right

ideas of former times, than what they ſhall derive from the labours of the preſent age.

My former Paper was confined merely to a general explanation of the manner of fortifying thoſe remarkable parts of Ancient Caſtles and Stong-holds, called *Keeps*, and *Maſter-towers*; without any great regard to the different ages in which any of them were conſtructed.

But, as the gradual intermixture and decay of Roman Art, and the progreſs and improvement of Northern, Saxon, and Norman Arts, are curious circumſtances that occur to obſervation, on a fuller ſurvey, I muſt now unavoidably make the different *Æras* in which theſe Buildings were erected, the firſt object of attention; as far as there is a poſſibility of tracing-out thoſe different periods with any degree of preciſion: and cannot but carefully remark the ſucceſſive gradual changes introduced in the mode of accommodation and defence. After which, the almoſt imperceptible tranſition, made by the Ancient Chieftains of this land, from a reſidence in formidable, ſtately, inconvenient Strong-holds, to that in Embattled manſions (Embattled without uſe, and almoſt without meaning); and at length to convenient and elegant Palaces, abounding with the luxuries of life; is a curious ſpeculation, which on this occaſion will unavoidably occur to the obſervation of every Antiquary; and which therefore I ſhall make the concluding part of the contents of this paper.

The notices left us by Camden, Leland, Holinſhed, Stow, and various other writers on the ſubject, concerning the building of ſeveral of the Caſtles mentioned by them, appear, on exact examination, to be very imperfect. They ſpeak with preciſion enough of grants of thoſe Manſions; of reparations; and of new erections; but it is very clear, that, in many inſtances, the original Buildings were in being long before the times they ſpeak of; and that they had neither ſeen, nor heard of, any

ſatisfactory records, concerning the reſpective ages in which they were firſt conſtructed.

SOME of theſe Buildings are ſtill exiſting almoſt entire, and will ſpeak for themſelves, better than any fragments relating to them, extracted from any ancient hiſtorians.

AMONGST theſe, two more eſpecially deſerve notice; Conniſborough in Yorkſhire; and Caſtleton in Derbyſhire; the antiquity of whoſe preſent Buildings will, upon examination, appear vaſtly greater than has in latter ages been at all conceived.

OF Conniſborough, Camden only ſays, that it is an old Caſtle, called in Britiſh *caer conan*; ſituated upon a rock; whither (after the battle of Maisbelly, when Aurelius Ambroſius had routed the Saxons, and put them to a diſorderly flight) Hengiſt their general retired, to ſecure himſelf; and a few days after took the field again, againſt the Britains, who purſued him; with whom he engaged a ſecond time, which proved fatal both to himſelf and his army: for the Britains cut off many of them, and taking him priſoner, beheaded him (if the authority of the Britiſh Hiſtory is to be preferred in this matter, before that of the Saxon Annals, which report him to have died a natural death, being worn out and ſpent with fatigue and buſineſs). But be that as it may; ſure enough it is, that a mount juſt before the gate has been always deemed his Sepulchre, in conſequence of a conſtant tradition.

THIS Caſtle was alſo the birth-place of Richard Plantagenet duke of York, grandſon to king Edward IIId, and grandfather to king Edward IVth, who tampering too ſoon for the crown, was beheaded by king Henry Vth.

THE Caſtle here, ſays Camden, *hath been* a large ſtrong-built pile; whereof the out walls are ſtanding, ſituate on a pleaſant aſcent from the River, but much overtopped by an high

high hill, on which the Town ſtands; before the gate is the agger, by tradition ſaid to be the burying place of Hengiſt *.

From hence therefore, on the whole, it clearly appears at *leaſt*, that there was a fortreſs *here* in the time of Hengiſt; and although Camden, and his editor, ſeem to think that the original one was afterwards deſtroyed, and rebuilt, we ſhall ſoon find reaſon to believe that in ſuch a concluſion they were miſtaken.

It is remarkable enough, that in the old firſt editions of Camden it is called *conines-borrough*—which if we pay any regard to ancient etymologies, and give credit to the authority of Verſtegan† (who ſays all places called *burg*, or *bury*, or *borough*, were places *fortified*), will lead us to underſtand this to have been named in *Saxon times*, the *kings fortreſs*, or the *kings keep*, or in other words the *royal palace*; as before in Britiſh times, its name *caer conan* ſignified *the royal city*.

We may fairly conclude, therefore, that although many Britiſh and Saxon fortifications were merely entrenchments of earth, yet that *here* was in the earlieſt times ſome building, and ſtrong place of reſidence; eſpecially as an ancient tradition has been preſerved, and is mentioned by old hiſtorians, which ſays, here was a Caſtle that *afterwards* belonged to king Harold.

The Conqueror beſtowed it upon William de Warren, with all its privileges and juriſdictions: which are ſaid to have been over twenty eight towns; and William de Warren, being a great builder, is commonly *ſuppoſed* to have re-edified it. But of this there is no proof; nor does any thing in the building afford the leaſt ground for ſuch a ſuppoſition.

Now then let the Caſtle ſpeak for itſelf. Nothing can be more extraordinary than the appearance of this ſtructure; nothing more unlike a Norman Caſtle.

* Gibſon's Camden, p. 706. 724.

† Verſtegan's Antiquities, p. 211. 215. 313.

THE great court, it is true, has ſome reſemblance of the courts of other Caſtles: but yet even this part of the fortreſs, when carefully attended to, will be found very unlike thoſe *Ballia* that were in uſe after the conqueſt.

AN area appears walled in; which was entered by a great gate way, between two round towers, after paſſing a draw bridge and deep ditch: but this area has neither the regularity, nor extent, of thoſe of the Norman Caſtles; nor any appearance of ſuch additional interior buildings beſides the keep, as uſually are found, within the circuit of Caſtles conſtructed by that magnificent people; the greatneſs of whoſe ideas appeared in their fortreſſes, as well as in their churches. In ſhort the very area of this ſtrong-hold might juſt as well be compared to the Roman Caſtle at Richborough, as to any Norman fortreſs; and might as well be ſuppoſed to have been formed by a Roman general, as by William de Warren. And ſtill more ſtriking is the contraſt with regard to the keep, or *maſter tower* itſelf.

THIS extraordinary ſtructure ſtands in one corner of the area, commanding a moſt glorious view of the windings of the river *Dune* or *Dun*, and of the adjacent country; if any ideas of the beauty of ſuch a ſcene could be conceived in thoſe barbarous times of deſolation, when this fortreſs was erected; and when not one ſingle window was conſtructed therein ſo placed as to behold it. I ſhall endeavour to deſcribe the particularities of the whole with as much preciſion as poſſible.

THE firſt thing that ſtrikes the eye, is a very remarkable ſloping part of the foundation walls, riſing to a great height, like a mount; and having in many parts, in conſequence of its being covered with earth and moſs, the appearance of a ſmall hill exactly of the ſame dimenſions as the Caſtle itſelf, (ſee F Iſt e f g h,) the bottom of this ſloping part appears almoſt circular; but higher up are ſeen, more fully, ſix vaſt, projecting, Buttreſſes, aſcending in a ſtill more ſteep direction, to prop and ſup-

port

port the building. Modern engineers would, perhaps, call the whole a regular *Glacis*, or rather a *Talus*.

IMMEDIATELY above this ſloping part, the Tower riſes, perpendicularly, to a great height. Its inſide forms a compleat circle; but on the outſide appear ſix additional ſquare turrets; which are, however, merely the continuation upwards of the buttreſſes juſt mentioned.

THE walls of this Tower are very nearly half as thick as its diameter within, which is about twenty-one feet; and ſome of the turrets, as they aſcend towards the top, are in a very few places hollowed out, and converted into cloſets, which have narrow loops.

HAVING ſurveyed this ſtrange appearance of the outſide; the next thing that draws attention, is the aſcent to the grand entrance; which is (and moſt probably always was) by an exceeding ſteep flight of deep ſteps (a b) on the South ſide, ſo narrow (not being, I think, much more than three feet in width) and ſo ſhallow, in the ſpace for ſetting the feet on every ſtep (whilſt there is no rail to hold by, and an abſolute precipice on either ſide), that even the going up is frightful; and the coming down, not to be accompliſhed without help, except by workmen accuſtomed to ſcaffolds, and the impending heights of lofty buildings.

AT the top of this aſcent, is a great door-way (a); very low, however, in compariſon of thoſe in Norman towers, and of very ſingular conſtruction; for although there is a ſtone arch turned over it (in imitation probably of thoſe which had been ſeen in Roman buildings), yet the nature of ſuch an arch ſeems hardly to have been underſtood, nor was it truſted to; for directly acroſs the diameter, and *underneath it*, is placed a great *tranſom ſtone*, like a beam; and the ſpace between it and the Arch is filled

filled up with ſtone-work; as if to aſſiſt the Arch in ſupporting the wall above.

UPON the whole it makes a moſt groteſque compound, of the door of an ancient *Dun*; or even of an old Egyptian temple (ſuch as thoſe of which Norden has given us many repreſentations), and of a Roman arch; ſeeming to proclaim aloud the age in which it was built, to have been a period, when a little improvement in architecture had been made, in conſequence of ſeeing a few Roman works; but when the rude architects had not ſeen enough, nor been ſufficiently informed, thoroughly to comprehend them *.

ON entering the door, we find an area, in the thickneſs of the wall, like a little Veſtibule. (See plan F. IV. a.) On one ſide whereof is a paſſage to the ſtair-caſe, which aſcends not in a ſpiral form, as thoſe of latter ages, but goes ſtreight through the thickneſs of the wall; like the rude ſtair-caſe of an ancient Northern Dun: It is, however, well and neatly conſtructed; and has a noble appearance.

THIS ſtair-caſe has no communication with the room on the firſt floor, except through the veſtibule; and therefore might be aſcended without entring at all into that room.

THAT room, however, ought not to be paſſed by unnoticed. It is compleatly circular; and has no window, nor even a loop-hole to it. But in the centre of the floor is a round aperture, like the mouth of a well (ſee F. II. at b), which opens into a moſt diſmal, dark, deep dungeon (bwt) excavated out of the midſt

* It is not to be wondered at, that the firſt Saxons ſhould adopt ſuch imperfect ideas of the ſtrength of the Roman arch, if it be conſidered, that in the latter times, Roman architecture, in this country, was in ſo imperfect a ſtate, that in Newport Gate, at Lincoln, there actually, was no regular *key ſtone* at all, to the arch; and three thin ſtones, ſeem to have been inſerted, on one ſide, by way of wedging the whole together.

of the artificial mount, and incloſed within the ſloping part of the foundation walls; and rudely vaulted over. At the bottom appears to have been a draw well; but there was no admiſſion for light or air, except through the aperture at (b); nor could the room, in the floor of which this apperture is, have the benefit of either, when the door was ſhut, except by means of a ſimilar aperture, which there muſt have been at (c) in the floor above.

We cannot therefore err in calling the lower of theſe frightful apartments, the Dungeon; and that next above, the Store Room; and the aperture, at (c), muſt have anſwered the triple purpoſe, of drawing up water, of drawing up ſtores, and of admitting air and light: for to let in which the more effectually, there is good reaſon to ſuppoſe that a ſimilar aperture was left in every floor, to the very top of the caſtle; and the rather, becauſe, without ſuch, even the ſtate apartments would be moſt wretchedly dark, each of them having no more then *one* window.

In other reſpects, however, we ſhall find they were highly finiſhed, and magnificent for ſuch a barbarous age.

The aſcent of the grand ſtair-caſe, from the veſtibule, through the wall, from (a) to (d) [F. IV.] is ſtately. It has no neceſſary communication either with the ſtore-room, or dungeon; and enters, at (y), into a fine circular room, the floor of which appears to have been ſupported, not by timbers *let into* the wall, but *laid upon* great projecting truſſes of ſtone, which ſtill remain all round the building; one whereof is repreſented, F. VII.

This room appears to have been finiſhed and adorned, with as much elegance as the times would admit of. The ſtone-work is exceeding compact, ſmooth, and good; the entrance from the ſtair-caſe at (d) F. V, is by an handſome arch; and directly oppoſite to it is another at (f.) as well conſtructed, leading to the ſecond flight of ſtairs which go up to the ſtate apartment, paſſing through the wall from (f) to (e).

In

In order to render the deſcription of theſe rooms as intelligible as poſſible, I ſhall beg leave to refer to four ſlight ſketches.

F. II. ſhews the concave interior half of the tower, looking towards the South.

F. III. ſhews the concave interior half, looking towards the North.

F. IV. is the plan of the firſt floor, on which you enter from the grand portal; and

F. V. is the plan of the firſt grand apartment, of which we are now ſpeaking.

In F. II. and III. (d v) is the ſection of the cavity, through which the firſt flight of ſtairs aſcends, within the thickneſs of the walls; and (e x) is the ſection of the cavity through which the ſecond flight aſcends.

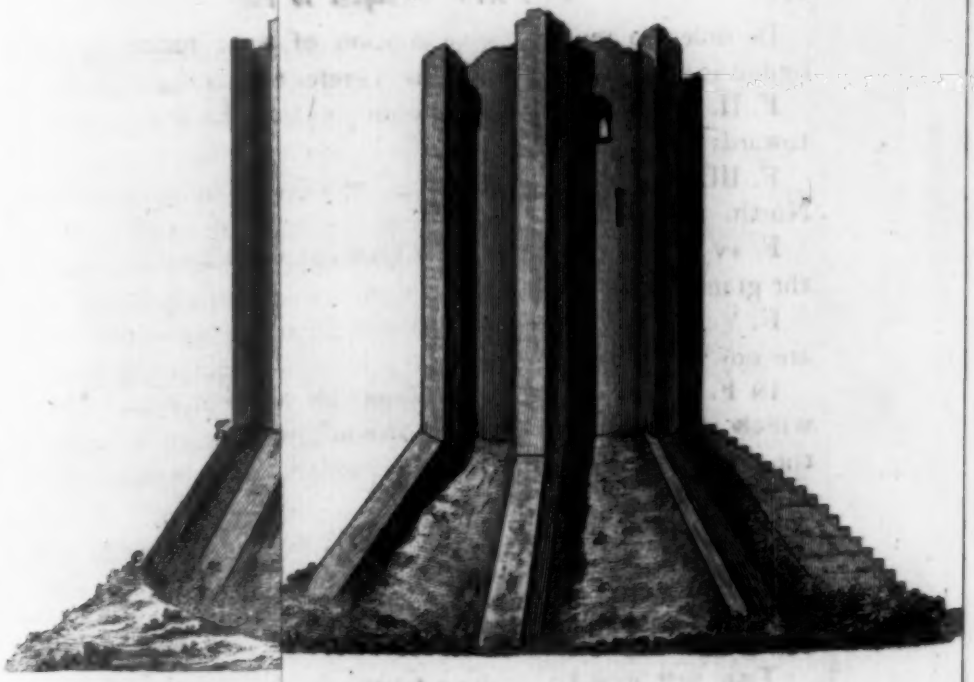
(m n) is the ſection of the floor of the firſt grand apartment; and (o p) the ſection of that of the ſtate apartment.

As to the reſt, the letters of reference, both in the ſections, and plans, all correſpond.

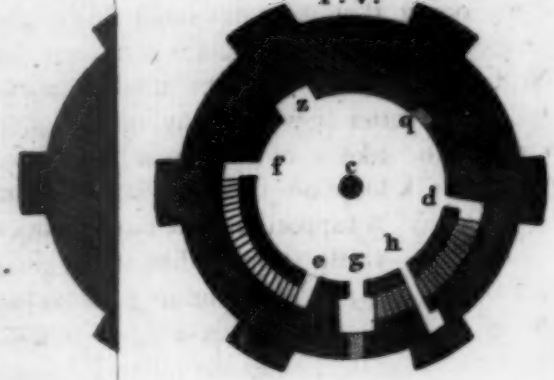
The firſt grand apartment I have already begun to deſcribe; which I cannot but conſider as the *Guard-room*, or chief place of rendevouz, of the principal part of the garriſon. And in this there is one object that moſt obviouſly ſtrikes the eye at firſt glance, and raiſes aſtoniſhment in the mind; a vaſt fire hearth, on the North ſide, conſtructed with an elegance which reſembles that of theſe latter ages, but having a chimney carried up through the wall, like thoſe in other Ancient Caſtles, and opening through a loop on the outſide. The front of this fire place, however, is ſupported, juſt like the door of entrance, by a wide arch, not truſted to as ſufficient for the purpoſe, but having two great *tranſom ſtones* running acroſs under it. To this rude imitation of the Roman arch is joined alſo as rude an imitation of Ionic or Corinthian pillars; three of which, in

cluſters,

F.VI.



F.V.

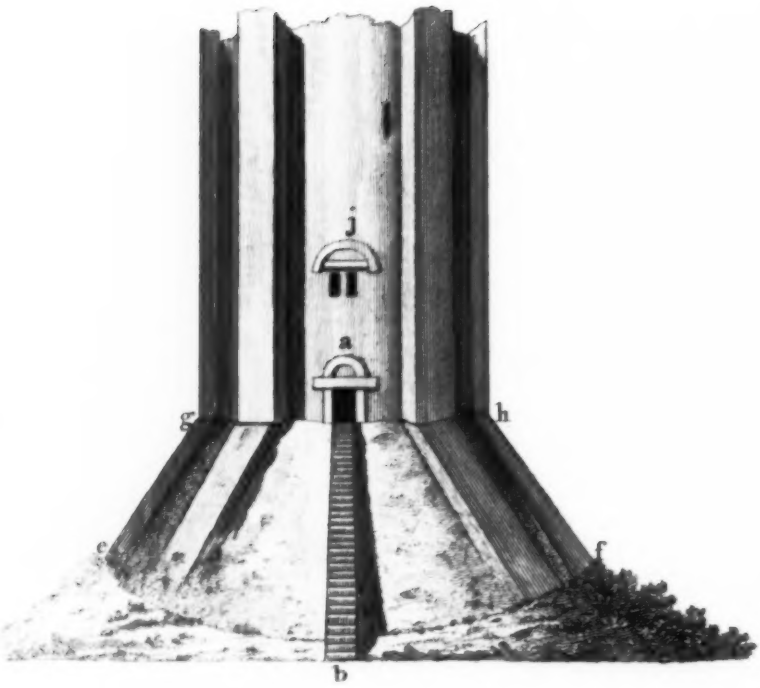


West

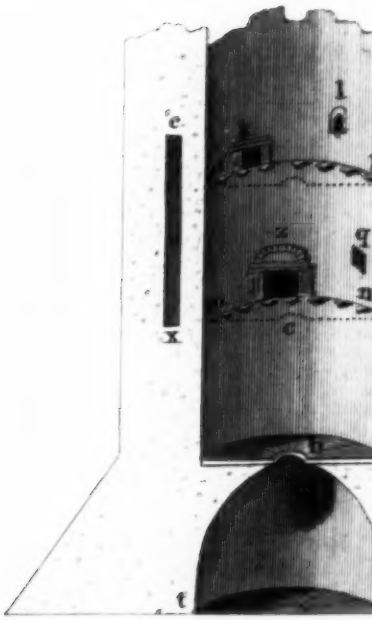
East

South

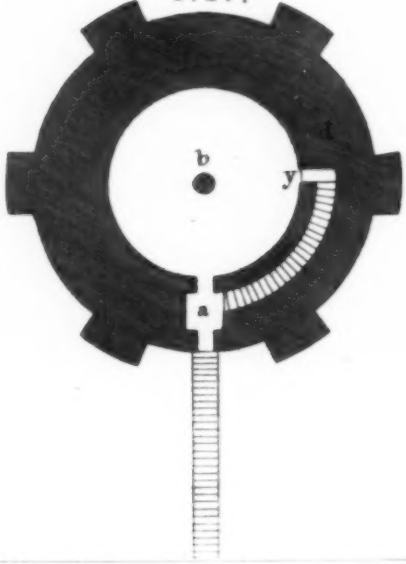
Fig. I.



F. III.

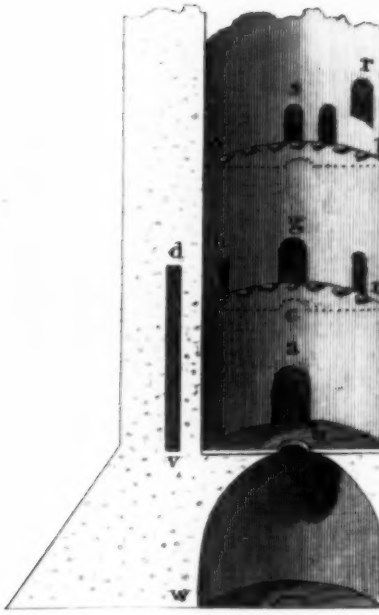


F. IV.



West

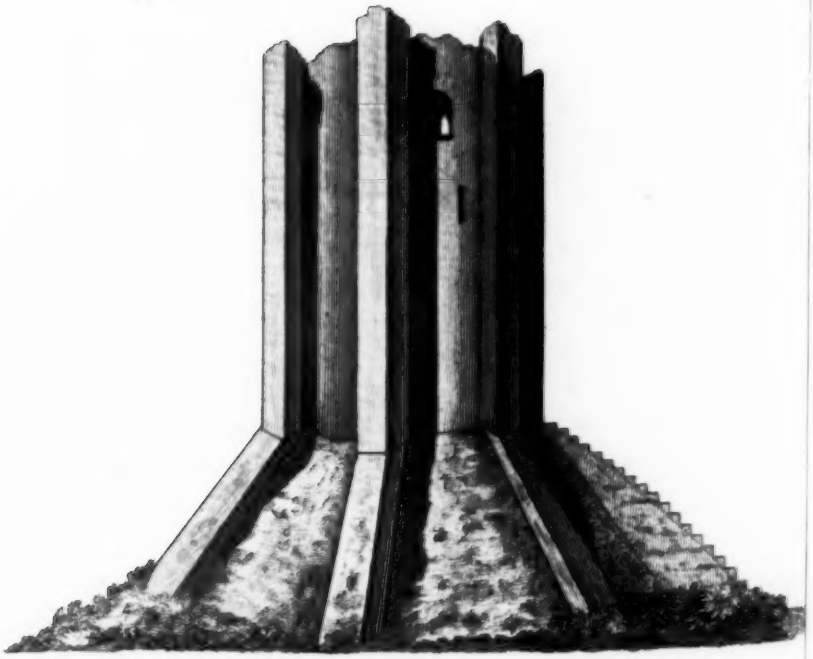
East



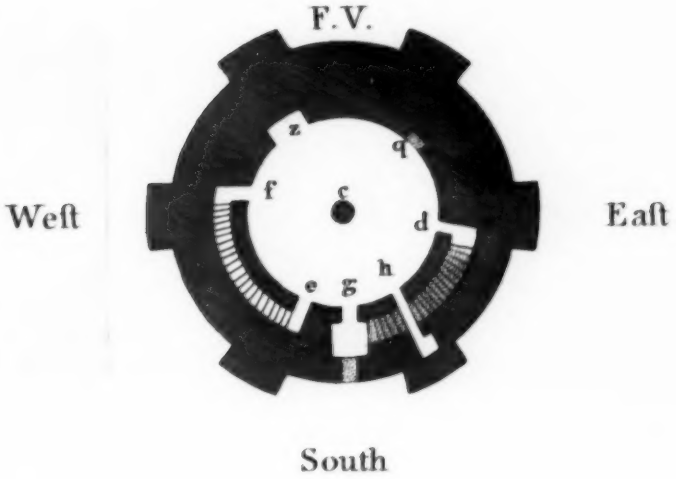
F. II.

Conisborough Castle

F. VI.



F. V.



in Yorkshire.

cluſters, on each ſide, ſupport the tranſom ſtones, and at ſome little diſtance produce the elegant effect I have mentioned, of the reſemblance of a modern ornamented chimney-piece.

NEVER did any thing ſurprize me more than the appearance of this fire-hearth; I could ſcarce give credit to what I ſaw: and my firſt concluſion was, that this caſtle muſt ſurely have been fitted up, and this addition made, in latter ages, about the time of Elizabeth, or James the Iſt.—But, to ſay nothing of the improbability of ſuch a room, in ſuch a ſmall tower, wherein there was no admiſſion hardly for any light, being adorned with ſuch expence in thoſe days, and having ſuch an exceeding large chimney piece built in it; the whole appears manifeſtly to be one *compact*, uniform piece of work with the reſt of the wall, and built of the ſame kind of ſtone: and, indeed, notwithſtanding the deceivable *external* appearance to the eye, yet when cloſely examined, there is nothing like the *real ſtructure* of a modern chimney or chimney-piece of the latter ages in this very ſingular part of the building.

F. III. at (z) ſhews the place it ſtands in;—and

F. VIII. ſhews it drawn on a larger ſcale;—as

F. IX. ſhews the deſign of the capitals of the pillars

AND the whole device ſeems to me moſt ſtrongly to indicate, a period of time, between the departure of the Romans and their arts from this country, and the introduction of ſavage foreigners, and their final eſtabliſhment here; a period between the loſs of Roman architecture, and the introduction of the Gothic; a period when barbarians, juſt arrived, mixing with the rudeſt part of the natives, were prompted to imitate imperfectly, and as far as their conceptions would allow, the few ſpecimens they had ſeen of Roman magnificence.

THE next thing that attracts the eye, is a narrow door-way (h), where the arch was either forgotten, or thought quite uſeleſs;

and where a transom stone *alone* covers the top; this led to a closet, that served for a privy, excavated, as it were, out of one of the great buttresses, and having a narrow winding drain to a side loop.

YOU then look round the room for windows; but you find none; only there appears a great arch (at g) which leads to a sort of recess, or small lobby, over the grand portal; wherein is the window that appears at (i) F. I. commanding entirely the steps of ascent on the outside; but small indeed, at best, for the conveyance, of any light, or air, to this apartment. We must conclude, therefore, that it was moreover lighted, as I have already hinted, by a circular perforation in the midst of the floor above. The window at (i) just described, like the door way underneath, has an handsome arch at top; but has, moreover, just in the same manner, the assistance of a great transom stone.

ON one side of the fire-hearth, and about half way between it and the door of entrance, is a little square nich in the wall, at (q) F. II. too small for any serviceable use as a locker, or cupboard; and the original design of which, may perhaps best be investigated from what we shall find appear in the state apartment over head.

To that apartment (after passing quite across this guard chamber) the approach is by a second flight of steps, constructed in the same manner, and as noble, as the former; no *winding* staircase is seen; but a regular, continued, gradual ascent, going streight on through a cavity in the wall, from the arched door at (f) up to another arched door at (e).

THIS chamber, from its decorations, appears to have been most manifestly the place of Royal residence. And it had a great window to the South West at (r) F. II. the only considerable one that appears in the whole building.

AT (S) is an arched door-way, leading to a little room over the grand portal, which seems to have served for a bed-chamber;

ber; and where, for ſecurity, and that the repoſe of any perſon reſting therein might not be diſturbed by any miſſive weapon, no light or air was admitted, except by a very narrow loop; although there was the only great window of the lower apartment directly under it.

THERE ſeems alſo to have been ſome little receſs in the adjoining buttreſs: but I could not get up to it, when I viſited this building, to be aſſured.

As this ſtate room was not deſigned to contain a great number of perſons like that beneath, the fire-hearth is ſmaller, but rather of ſtill more elegant conſtruction. Here again we find the imitation of Roman capitals; and a tranſom ſtone, inſtead of an arch; the former appearing to have been conſtantly thought the greater ſecurity, where there was any conſiderable width, and a weight above to be ſupported, and the arch appearing to have been deemed only an additional help; for it is very remarkable, that in this building all the arches which are without tranſom ſtones are very narrow.

THIS latter fire-hearth is repreſented more at large F. X.

BUT the moſt remarkable appearance in this room, and indeed in the whole ſtructure, is a ſmall nich at (l) richly ornamented; the deſign of which can hardly be miſtaken. From its dimenſions, and form, it ſeems totally unfit for any other purpoſe, than that of containing ſome ſmall idol*; and ſtrongly indicates, that this caſtle was built, and in uſe, in Pagan times.

* From the idols dug up near Strelitz in Mecklenburg towards the cloſe of the laſt century, and deſcribed in a work publiſhed in German at Berlin in 1771, entitled "Runic Antiquities;" from thoſe dug up at the Deviſes in Wiltſhire, in 1714, and repreſented in a curious plate publiſhed by Mr. William Muſgrave in 1717; and from thoſe which were ſhewn to the ſociety of Antiquaries by the Preſident, the year before laſt, having been dug up at Exeter, of which an account is given at the beginning of this volume; it fully appears, that, whilſt the deteſtable abomination of idolatry were practiſed, the images made uſe of by the Saxons, and other Northern nations, and even ſometimes by the Romans (except thoſe placed in public Temples) were in general very ſmall.

IT is exactly represented F. XI. and may with good reason lead us to conclude that the square nich *beneath* was for a similar purpose.

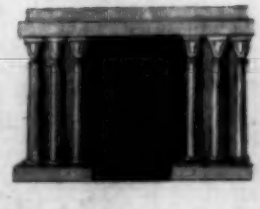
I HAVE not described *every* arch leading to every recess or closet; but have been most exact, to the utmost of my power, with regard to all that appeared important.

AND now, whoever considers, in this building, the rude, but diligent imitation of Roman architecture; the staircase running *streight* though the walls, without any turnings or windings, exactly like those in a Northern *Dun*; the whole inside differing so little from that of a dun, and only having smoother, and better finished walls and arches, and floors contrived to hold more people, and to exclude the weather better, but still leaving a circular area from top to bottom open in the middle; and the unlikeness of the whole to any Norman structure; and adds to these considerations the appearance of the niches; will I think have little scruple to allow, that nothing can more strongly proclaim an age of *pagan* barbarity and ignorance, struggling amidst the disadvantages it laboured under, and striving to emerge from its wretched estate, to a degree of civilization and refinement.

I CANNOT, therefore, but conclude this Tower to have been built by *Hengist*, or some Saxon king, before the conversion of that people to Christianity, if not much sooner; and to be one of the most ancient, as well most perfect remains of antiquity, in this kingdom

NEITHER machicolations, nor the portcullis, nor the mode of securing loop-holes, seem to have been invented at the time this tower was built.

WITH this, therefore, I shall begin: and call it *a Saxon castle of the first ages of the heptarchy*; begging leave to oppose an idea, too commonly received, that all these castles were Norman structures, and that the Saxons had no fortifications but of earth; which



In Conisborough Castle.

which is undoubtedly no more true, than that the Romans had only ſuch; an aſſertion, that (notwithſtanding their numerous camps fortified in that manuer) can never be ſupported, whilſt the ruins of Richborough remain.

WHAT greatly confirms alſo the idea of this caſtle being built at the time I ſpeak of, is its very near reſemblance to a Scotch dun; it appearing indeed to be only the firſt improvement of ſuch a kind of building, by architects a little more civilized.

WE are well informed, that the Saxons had made a league with the Picts, and Scots about that æra: and that the greateſt part of their force conſiſted of great bodies of thoſe people; who joined them when they iſſued out of Kent towards the north, aſſiſted them to waſte all Britain to the weſtern ſea, and were their confederates when they ſeized this very part of the country *. If I may be allowed ſuch an odd conception then, I cannot but view this tower, as proclaiming an alliance of Pictiſh, Scottiſh, Saxon, and Roman architecture.

NOR are the other parts of this fortreſs leſs extraordinary and odd; though I will not preſume to ſay but they may poſſibly be all (as ſome of them certainly are) of a later date.

F. XII. is a rough ſketch of the Area, or *Ballium*; as it appears, to the beſt of my remembrance. I was prevented by a very heavy ſhower of rain, from taking ſo exact a ſurvey of the north ſide as I could wiſh; but all the reſt is pretty accurate, though not laid down from actual admeaſurements.

AT (1.) and (2.) are the remains of two great round towers; between which was the great outward gate, after paſſing a draw-bridge and deep foſs.

AT (3.) was another tower.

AT (4.) is the ſituation of the Keep we have been deſcribing; the foot of the flight of ſteps leading up to it approaching very near to the ſouth wall.

* See Milton's Hiſtory of England to the Norman Conqueſt, B. III. p. 31. Sammes's Britannia, p. 472.

AND

AND in the corner, at (6), is the moſt remarkable piece of fortification I ever met with, in any place. It was clearly a *poſtern* gate, ſtrongly defended in a very odd manner; which may beſt be underſtood by repreſenting it on a larger ſcale F. XIII.

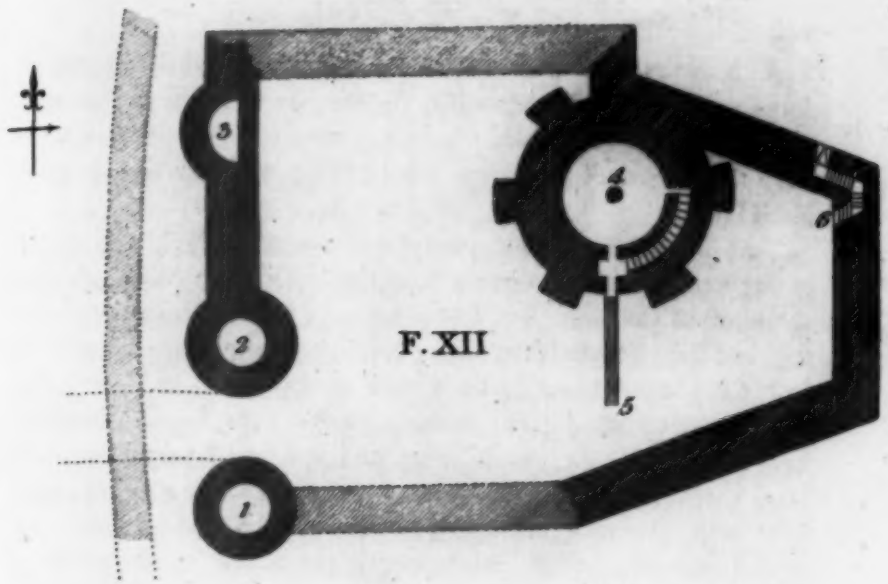
THE whole conſiſts of a very narrow vaulted paſſage, high enough for a man to walk upright, and made through the thickneſs of the wall. But from (1.) to (2.) both the arched paſſage and ſteps deſcend very ſteep: from (2.) to (3.) they aſcend alſo in as ſteep manner: at (4.) is a very narrow loop, to ſurvey and protect the outward gate; from (3.) to (5.) the ſteps ſtill aſcend again: and from (5.) to (6.) they at laſt deſcend very quick and ſteep to the outward gate: over which, at (7.) is a ſecond narrow loop, the arch belonging to which is entered from the top of the ſteps at (5); and it commands the outſide of the gate.

THE deſign of all theſe kinds of fortreſſes was to enable a ſmall number of men to hold out againſt a great force; and perhaps nothing ever was, or ever could be contrived more effectual, than this poſtern gate, to enable one or two brave men to defy an whole army, before the invention of gunpowder.

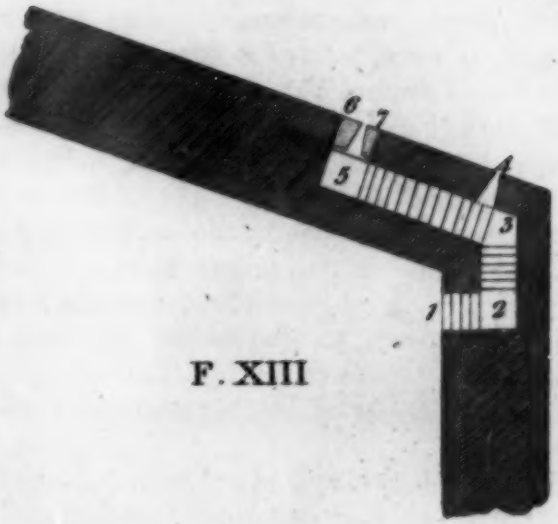
THUS have I finiſhed the deſcription of this caſtle. I ſhall only juſt add at F. VI. a ſide-view of the keep; for the ſake of ſhewing the only great window in the ſtate apartment, and the ſide appearance of the ſteep flight of ſteps at the entrance. But before I proceed further, I muſt beg leave to ſubjoin alſo the repreſentation of one or two ancient Saxon door-ways, drawn on the ſpot, to ſhew in what manner the *tranſom ſtone* was by gradual degrees left out, and the flattiſh *under arch* ſubſtituted in its room.

F. XIV. is the door of an old Saxon tower of a church at Lincoln.

F. XV. is a ſlight ſketch of a door-way, of the old tower of the church of the knights templars at Temple Bruer; which



F. XII



F. XIII

Plan of Connisborough Castle.

F. XV

F. XIV

F. XVI

Saxon Door Ways.

was undoubtedly Saxon; although the inſide was *afterwards*, by the knights templars, adorned and lined with pointed Gothic arches againſt the walls all round.

And F. XVI. is a remarkable old Saxon arch in an ancient building, oppoſite to the palace of John of Gaunt, at Lincoln.

There is alſo a remarkable ſpecimen of this kind in the great gate-way of the abby of St. Edmundſbury, in Suffolk, built in the time of Canute; and another (even of an imitation of a ſpecies of flat tranſom ſtone acroſs the lower part of an arch) preſerved in the enriched portal of Barfreſton church in Kent: but both theſe have already been engraved, and therefore need no repreſentation here. The gate-way of the abbey at Reading, in Berkſhire, may alſo, without impropriety, be mentioned as an inſtance of the imitation of this kind of double arch, ſubſiſting even long after the time of Henry Iſt; when its orginal intention was probably quite forgotten, and it was conſidered merely as a ſort of ornament.

The next caſtle which ſtrikes us with high ideas of its great antiquity, is *Caſtleton* in *Derbyſhire*; perched proudly, like a falcon's neſt, on the ſummit of an almoſt inaceſſible rock, high impending over the mouth of one of the moſt horrid and auguſt caverns that nature ever formed. The eminence whereon it ſtands is nearly inſulated; the top of the adjacent hill over the cavern being much lower, and joined, even there, only by a ſteep precipice falling from the ſummit of the one down to the other.

On the weſt and eaſt ſides the rock is quite perpendicular; and to the north and ſouth ſo ſteep that it cannot be aſcended without the utmoſt difficulty. The whole commands a fine view of the country round, and of the mountain called *Mam Tor*, with the double foſs of the old encampment (ſo little known) placed on the higheſt brow of that ſhivering mountain.

There

THERE is not even any tradition preſerved of the firſt building of Caſtleton. And ſome *herring-bone* work in the walls ſhews that it muſt have been of vaſt antiquity. Camden, ſpeaking of the village of *Burgh* in Derbyſhire, ſays only *, "near "this *Burgh* there ſtands an *old* caſtle, upon the top of a hill, "formerly belonging to the *Peverells*; called the *caſtle in the* "*peake*, and in latin *de alto pecco*; which king Edward III. gave "with this manour and honour to John duke of Lancaſter his "ſon, after he had reſtored the earldom of Richmond to the "king." But he does by no means aſſert that it was built by the *Peverells*, or any Norman; and indeed all that appears, from the beſt account that can be obtained (of which I had information from the moſt unqueſtionable authority) being from an ancient manuſcript, in the college of Mancheſter, amounts merely to this; that in this caſtle William de Peverell, natural ſon of William the Conqueror, had his reſidence, and kept his court; and that he had alſo another habitation, connected with this, at *Brough* (or *Burgh*), near Caſtleton; from whence was an ancient road to Buxton, called long before his time *Batham gate*, or the gate leading to the bath. All which plainly imports, that *here* was a very conſiderable fortreſs, the dwelling of ſome ancient chief, and his train (for whoſe uſe ſuch a road was made), long before the Conqueſt: and that even William de Peverell found the ſmallneſs of this tower inconvenient; ſo far was he from having built it.

AT this very place, *Brough* (or *Burgh*), about 18 years ago, were dug up ſome old Saxon idols; which circumſtance I would wiſh to have remembered, and connected with what I ſhall mention hereafter.

* Gibſon's Camden, p. 495.

Let us now examine the building itſelf. The aſcent to it was by a narrow winding path, up a moſt formidable ſteep, where a very ſmall band of men might defy an army: and after aſcending this you find the caſtle-walls to poſſeſs nearly the whole of the ſummit.

The great gate was on the eaſtern ſide, but is now deſtroyed: and it ſeems to have had no mote or draw-bridge; as indeed none could be neceſſary in ſuch a ſituation.

On entering the area (or as it was called in ſucceeding ages the *Ballium*) there appear no veſtiges of additional buildings, that I could trace; but only a large ſpace for encampment, with two little ſquare turrets, and the keep itſelf.

The whole is repreſented F. XVII. as it appears to the eye, with ſufficient accuracy to convey a tolerable exact idea of the whole. I will not indeed be anſwerable for every *ſet-off*, or projection, or curvature, in the outward walls; nor will I preſume to ſay whether the area ought not to be repreſented rather larger every way, in proportion to the dimenſions of the keep: but I will venture to affirm, that the ſituation of the keep itſelf, and its plan, is moſt accurate; that the account of the interval between it and the Southern wall is moſt faithful (having examined it with the utmoſt care); and that there is no imperfection which can materially affect the general *ſcientific idea* of this fortreſs.

(f g h i k l) repreſent the baſe of the rock: and the caſtle-walls (m n o p q) nearly cover the ſummit.

(a) was the place where ſtood the great gate, with its towers, now deſtroyed.

(b) was the keep, or great tower of reſidence.

(c) is the ſituation of the great cavern beneath, at a moſt tremendous depth (c l k); being one continued perpendicular precipice, of at leaſt 87 yards, or 261 feet in height.

(d) is one of the ſmall towers, with a window looking outwards; which might ſafely be allowed, as there was no danger of any near approach over the precipice, and it was therefore as well protected as any window in the upper apartments of a keep.

(e) is the other ſmall tower.

(t r s) is the place where appear remains of the ancient approach to the great portal of the tower.

(g h) is an exceeding narrow valley, or rather a cleft between the rocks, near 200 feet in depth, with a mountain riſing on the oppoſite ſide; which valley is alſo continued to the South of the rock, and there hemmed in with broken crags.

AFTER climbing the ſteep aſcent, and traverſing a ſmall part of the brink of the precipice, in order to arrive at the great portal at (a), the whole area of the caſtle was next to be paſſed through, before the keep (or tower of reſidence) could be approached; which ſtands at the remoteſt, and beſt-protected corner of the area; and bears evident marks of the higheſt antiquity.

ITS dimenſions within, like that at Conniſborough, are ſmall; being only 21 feet by 19, or a very little more: but the walls are near eight feet in thickneſs.

IT had no entrance on the ground, unleſs it was by a very narrow winding paſſage, where you now enter (a b) F. XVIII. by the ſide of which was a ſteep winding ſtair-caſe marked (c): and whether there was any *original* entrance even here is perhaps to be doubted.

AT (d) is a ſmall loop to the Eaſt; and at (e), another to the North: but there was no loop towards the outſide of the caſtle, except one at a great height, nor to the South; nor does the accurate mode of conſtructing loops, nor the uſe of the portcullis,

portcullis, nor the invention of wells within the wall for drawing up the beams of military machines, appear to have been underſtood, when this caſtle was conſtructed, any more than when that of Conniſborough was built.

In the room above, F. XIX. was the ancient great entrance at (g); to which it ſeems exceedingly probable (from ſome ſmall fragments of ruins ſtill remaining on the outſide of the building, there was an aſcent, by a flight of ſteps, that led firſt to the top of a low wall, built acroſs the ſpace from (r) to (t), ſee F. XVII; and from thence along a platform to the great portal; having moſt likely a draw-bridge, placed above the crown of the little arch of entrance (a) beneath.

Many circumſtances lead to this concluſion: for in the firſt place, that the arch at (g) F. XIX. was the grand entrance, is obvious from its being originally level with the floor; whilſt the two other great arches, manifeſtly deſigned for windows, were not ſo: and the places where the beams of the floor were laid cannot be miſtaken. Moreover, both the crown of this arch, as well as the bottom part of the portal, is lower than thoſe of the windows.

And yet, although the ſtate portal muſt have been here, and is, indeed, a very magnificent one, nothing can be more evident, than that a flight of ſteps could hardly, with any degree of poſſibility, be made to aſcend to it, between the outward wall of the caſtle, and that of the keep itſelf, without blocking up the lower arch of entrance at (a) F. XVIII. (at whatever period of time that was made); unleſs by ſome means or other they were ſo conſtructed, as to be carried over the top of it. Nor indeed would there be ſufficient length for a flight of ſteps, unleſs they ran out ſideways into the area before the building towards the Eaſt, or were made to wind round the South Eaſt corner of the caſtle.

I CONCEIVE, therefore, the grand approach to have been as represented, F. XX. The steps first ascending from (x) to (r), where was a considerable plat-form; after which the passage went directly over the top of a wall, at (r t), to a draw-brigde at (z), and thence, by a continuance of platform, to the portal (g), in which case the approach to the steps would be thoroughly well commanded (as in point of security it ought to be) both by the lower loop at (d), and by the great window above at (k). And this will account for the loop at (d) being placed so *irregularly*, near one corner of the room, instead of being placed in the middle, as the window above is.

SUPPOSING also the great entrance to have been in this manner, it will allow the lower lesser entrance, at (a), to have been approached by some small postern arch, in the cross wall, under the platform (r t), not very unlike the method that was afterwards adopted in castles of much better and more skillful construction.

LET us now return to the examination of the first grand apartment, F. XIX.

AT (g) was the grand entrance we have been describing.

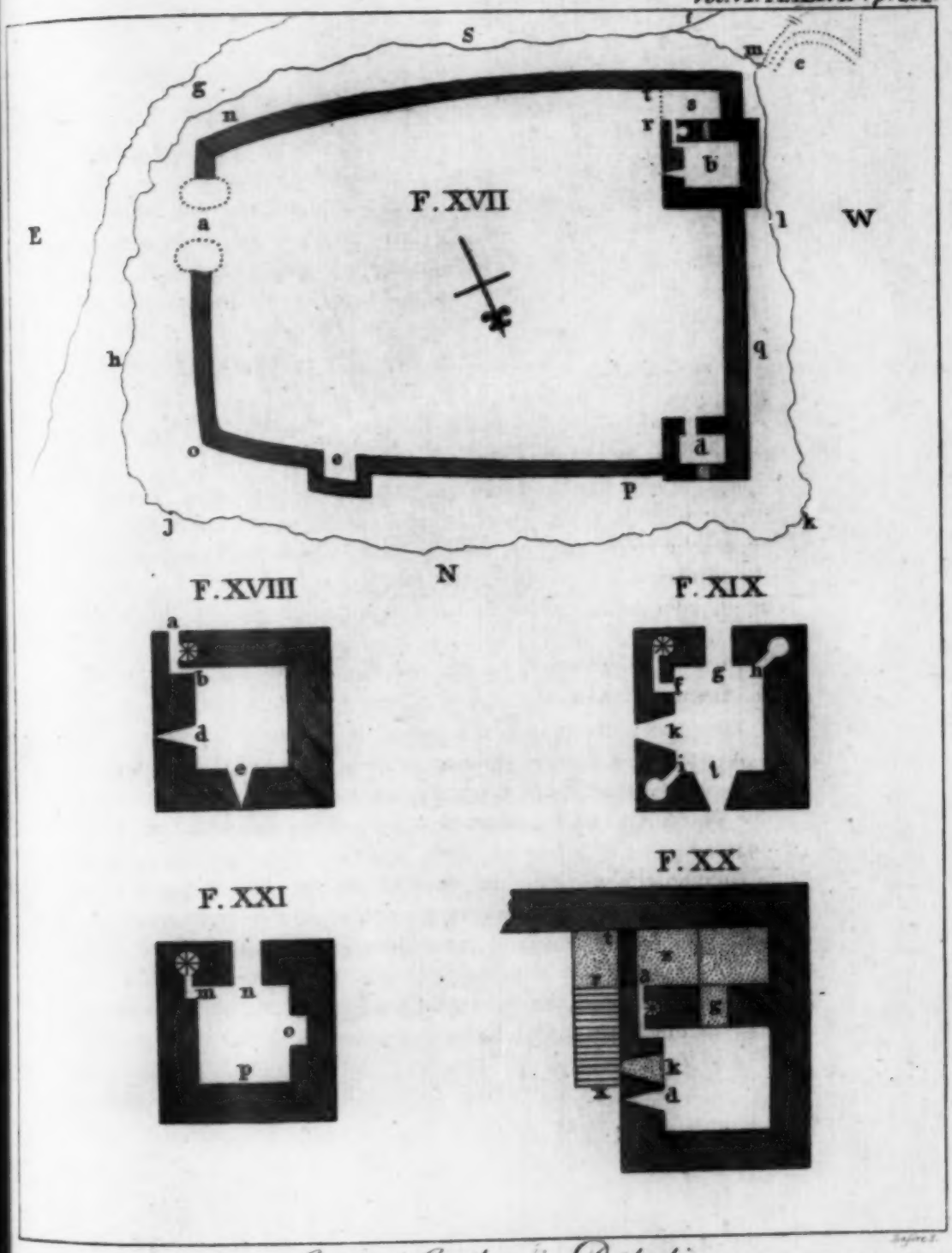
AT (k) was a large window, which, however, no weapon, shot from the outside of the castle walls, could possibly reach.

AND at (l) was another window, in a situation equally guarded.

BUT on the west side, impending over the precipice, and exposed to the country, was no window at all; nor any opening whatever, unless it was a very narrow loop near the top.

IN one of the corners, at (h), is a narrow passage, to a small closet in the wall, which served for a privy; having the usual kind of outlet through a loop.

AND



Castle at Castleton in Derbyshire

And at (i) is another very ſimilar paſſage, and cloſet, ſuppoſed (by the guide who went with me) to have been uſed for the ſame purpoſe; but where I rather ſuſpect was the *well:* unleſs it was here, as at *Connisborough*, in the centre of the building. Which-ever place it was in, it is now ſo compleatly filled up, that nothing can be aſcertained with certainty relating to it; every one therefore is at liberty to form his own concluſions: but no one acquainted with theſe kind of buildings can have any doubt as to there once having been a well in this tower.

At (f) is the communication with the ſtair-caſe, ſecured here, as below, by being very narrow, and having alſo a ſharp turn.

By this ſtair-caſe the aſcent was, from the room I have been juſt deſcribing, to the upper *ſtate apartment*; the entrance to which was at (m) F. XXI. And over the top of the ſtairs is a ſort of arched dome of ſtone, very odd, yet very neat.

In this room was a large window, facing the South, at (n).

But the moſt remarkable thing *here* is a large nich in the wall, at (o), with a ſingular kind of canopy, or ornament, at top; which having no window belonging to it, nor any flue above, nor any outlet that could poſſibly induce the leaſt ſuſpicion of its ſerving for a chimney, leaves us room to ſuſpect it might have been deſigned for the ſame purpoſe as that ſmaller one at Conniſborough; and was indeed the *idol cell*, or little idolatrous chapel, in Pagan times. A circumſtance, which if it be connected with that of the digging up certain ſmall idols themſelves, in this neighbourhood, a few years ago, will ſtill add further ſtrength to our concluſion, that this caſtle was of the higheſt antiquity, and may with the greateſt propriety be claſſed with that at Conniſborough.

It is very remarkable, moreover, that on the North wall, at (p), there is a very odd appearance of projecting ſtones, in the form

form of a pent, as if, in latter ages, whilst the castle was in use, a roof had been *let in*; the sides of which were placed beneath this cell, on purpose to exclude *it* out of the apartment, from a just abhorrence of its original design.

SUCH therefore, as these two, I think, we may now fairly conclude, were some of the fortresses, and places of Royal residence, during the Heptarchy; although there unquestionably were, during the same period, many other Saxon fortifications, consisting merely of entrenchments of earth; which have hitherto, for want of due examination, been considered by some Antiquaries as the only Saxon castles.

WHETHER the tower of Guilford castle in Surry were not also one of these, may, I think, be justly questioned; especially considering that it consisted, like those we have been describing, only of one room upon a floor; that its windows were evidently of Saxon construction, before they were altered; that neither the portcullis, nor mode of properly defending loops, seem to have been known when that building was constructed; and that (as Mr. Grose well observes), not only Camden * and Leland, but even Aubrey, and Salmon, who wrote the Antiquities of Surry, content themselves with simply mentioning its existence; neither the founder, nor the *æra*, of its first construction being known; only we find the first time it appears in story to be a little *before* the Conquest, when it was the theatre of an horrid tragedy, the seizing of Prince Alfred, in order to put his eyes out, after he had been treacherously conducted hither by Earl Goodwin, under pretence of being honourably and refreshed.

* Camden says (p. 154.) Guilford, or Guildeford, or Gegldford, was formerly a village of the English Saxon Kings, and given by will to Athelwald, by his uncle King Alfred. And he adds, there is now a house of the king's, though gone to decay; and not far from the river the ruinous walls of an *old* castle.

PERHAPS, also, the odd *herring-bone* stone-work in the walls, and the appearance of Roman brick in some parts, should further be mentioned, in proof of the early date of this tower.

As to the machicolations at one small part of the top, and the many additional buildings in the area around, of which some ruins remain; and the outward castle-gate, where was a portcullis; they were all most undoubtedly additions in latter ages. But the Keep I am inclined to consider as being, like those just described, a *Saxon* castle, constructed during the time of the Heptarchy *. What others there were of the same age, I leave, at present, to the examination and determination of the curious; wishing, however, Chilham castle, in Kent, to be particularly attended to, which I have not yet had an opportunity of examining.

AFTER the first towers, built upon this small, confined, and rude plan, the next improvement that was made in the military art of defence, and in national fortifications, was by that great and extraordinary man, for the times in which he lived, *King Alfred*. Educated in the school of adversity, and taught by suffering to seek surer and more convenient means of protection, for himself and his people, than they were as yet acquainted with, he contended with ancient prejudices; brought from abroad all the information he could gain; and improved thereupon, by the assistance of his own great natural genius, and that of the most enlightned of his contemporaries whom he could meet with. He applied every known improvement of architecture to military purposes †; which before his time had been confined almost wholly to religious structures; and erected

* An account of this castle is given in my former paper in the Archaeologia, vol. IV. p. 409.

† Bentham's Hist. of Ely, p. 27. Floren. Wigorn. ad An. 871 and 887. Ingulphus, Hist. p. 27.

noble

noble fortresses in different parts of the kingdom. And to him, or at least to his skill and abilities, we owe those once glorious piles, Colchester Castle, built by his son King Edward; and Norwich Castle, built by King Canute, in imitation of the style of building introduced just before his conquest.

CANUTE wisely saw it was far superior to his own Northern plans, and therefore preferred and adopted it *.

THESE two castles, of Colchester and Norwich I have already fully described in my former paper; and have now only to add, that as, from various circumstances, I suspect the portcullis, and mode of defending loops, to be of later invention than the times we are speaking of; so probably not only the portcullis in the modern great entrance at Colchester, but also that at the great entrance at Norwich, were subsequent additions, of a far later date than the erection of those castles.

IT may be remembered, that I mentioned there were lately to be seen in the great stair-case leading to the portcullis, at Norwich, the arms of a chieftain †, Thomas de Brotherton, of the age of Edward IId; and the whole stair-case seems manifestly to have been an addition, made about the same period, when probably the portcullis also was there added.

* It is very remarkable that Canute, in this instance, laid aside the Danish mode of building fortresses, and adopted Alfred's plan, though he preserved the use of the mount; Norwich Castle being erected on an exceeding large one. And it is no less remarkable, that when William the Conqueror, and his Normans, in consequence of their Danish descent, afterwards revived Danish architecture; yet they also very soon adopted and improved upon the same plan of Alfred's; even sometimes laying aside the Danish mount entirely. Inveterate prejudices, however, amongst them were still hard to root out; and during the space of several years, many castles were built by Norman chiefs, some on the one plan, and some on the other; as will be shewn in the further pursuit of these observations.

† See Archæologia, Vol. IV. p. 406.

IN

But although this device was not introduced by Alfred, yet there were other great improvements of theſe buildings made by him, and his ſucceſſors; which conſiſted in the increaſed dimenſions of their towers; the capacity of containing a greater garriſon and more numerous ſtores; the more extenſive outworks; the deceptions of weakneſs to miſlead beſiegers, (now firſt adopted); and the pious introduction of chapels for Chriſtian worſhip: all which circumſtances appear in their caſtles; and may be particularly remarked in the two I have juſt mentioned, and heretofore deſcribed.

Let us now proceed to the next ſucceeding ſtep in the alteration of military ſtructures in this kingdom; that which took place at the time of the Conqueſt.

The Normans (magnificent as they were) ſeem, at firſt, to have entered this country, with ideas of fortification quite different from, and inferior to, thoſe of the Saxons; though they afterwards adopted the latter, and even greatly improved upon them.

Their firſt caſtles, and their firſt ſtyle of architecture, are almoſt every where to be diſtinguiſhed.

Deſcended from the Danes, they ſtill retained Daniſh ideas; and conſidered the *high mount*, as the moſt eſſential part of a fortreſs. As therefore the high *inſulated hill* is characteriſtick of almoſt every Daniſh camp, ſo the ſame kind of hill, as the baſis of a round tower, is characteriſtick of all the *firſt* Norman caſtles.

William the Conqueror (ſays Stow), with an army, went to Nottingham, and there builded a caſtle; he alſo went to York, and there cauſed two caſtles to be builded, and put in them garriſons: he commanded alſo caſtles to be made at Lincoln, and in other places *, about the year 1068. Let us ſee whether the remains of theſe will not illuſtrate moſt fully the Norman mode of conſtructing ſuch edifices.

* Stow's Annals, p. 109.

As to that at Nottingham, indeed, the keep has long ſince been deſtroyed; it was manifeſtly, however, on a very high and ſteep hill; from whence was the curious ſubterraneous paſſage, ſtill remaining, and called *Mortimer's hole*; which ſerved for a ſally port: but one of thoſe at York is yet in being, and deſerves the moſt minute attention.

IT is now called *Clifford's Tower*. Camden gives us very little information about it: he only ſays, William the Conqueror *built a prodigious ſtrong caſtle*, to keep the citizens in awe *. To which the Editor adds, near the caſtle ſtands the ſhell of Clifford's Tower, which was blown up in 1684 †.

THIS, therefore, which moſt evidently was the ſtrongeſt part of the whole building; having defied both the blaſt of powder, and the injuries of time; was undoubtedly a part at leaſt of one of the *two* caſtles mentioned by Stow; and being one of the firſt buildings of the Conqueror, may ſerve to explain what the ſtyle firſt introduced by him was. And eſpecially as we ſhall find, both Lincoln, and other buildings of the early part of his reign, moſt perfectly to agree with it in their general deſign.

IT is built on the ſummit of an exceeding high artificial mount; the top of which it very nearly covers; and the ſides of which are even ſtill ſo ſteep, that it cannot be aſcended but by a winding path, that has been cut out of late years; or by an old ſteep flight of ſteps, ſituated on the ſide next the other part of the caſtle; where was originally a drawbridge, paſſing over the ditch, and forming a compleat communication; and where the gate in the old wall encloſing the area of the adjoining caſtle through which the paſſage was is ſtill viſible, though now blocked up.

* Gibſon's Camden, p. 717. 734.

† Drake intimates, that it was blown up by deſign; the citizens of York being not at all unwilling to get rid of ſo troubleſome a neighbour, and ſuch an inconvenient badge of diſtinction as this, which they called their old Mincepye. Drake's Antiquities, p. 289.

SITUATED in this manner, on ſuch an inacceſſible eminence, it needed not to have, nor do we find it had, the great elevated portal, ſecured by being placed at a great height above the foundations; ſuch as we find in the ſucceeding Norman Keeps. On the contrary, this portal ſtands on the ground, at the brink of the precipice, and at the very brow of the ſlope, and ſteps, that aſcended from the drawbridge.

THE plan of the tower conſiſts of four ſegments of circles, joined together, ſee F. XXII. The longeſt diameter, from periphery to periphery, being 64 feet; and the ſhorteſt, from interſection to interſection, being 45 feet; and the walls being between 9 and 10 feet thick.

FROM hence it is obvious, almoſt at firſt ſight, that no beams for floors could well reach acroſs, though the places for timbers are ſtill moſt clearly viſible in the walls: they muſt have had ſome ſupport therefore in the middle; where probably were poſts, or ſtone pillars, placed around the circumference of a ſort of open well, which both afforded light and air, from the top to the bottom; and afforded alſo a means of drawing up machines of war to the upper part of the tower; wells in the wall, for that purpoſe, not being as yet invented.

AN ingenious artiſt of modern days, might perhaps conſtruct a floor (with leſs trouble than the ceiling of the theatre at Oxford is conſtructed,) to cover the whole, without props; but it is evident, from the direction of the holes in the wall, that the beams went ſtreight acroſs, to ſome ſupport in the middle; and not in ſuch a direction as thoſe of a floor ſo framed muſt have gone. And indeed, I may add, that without ſuch a *well* in the centre, the lower room could have had very little air or light.

ON the ſide next the caſtle (where was the ſteep deſcent of ſteps beforementioned, and the drawbridge,) is a little additional

ſquare tower: added to the building (as Mr. Drake affirms *) in the time of Charles I. But, whether it was then entirely a new addition, or, as I rather ſuppoſe, a mere *reparation* in the room of an antient turret ſtanding in the ſame place; in this ſpot was undoubtedly the original and only entrance, at (a).

THIS we find defended by a ſtrong maſſy gate, at the head of the ſteps; where one man might make a ſtout defence againſt an hoſt, before the invention of gunpowder. It is then ſecured again, at (6), by a portcullis; a means of defence which ſeems *now* firſt to have been introduced, by the Normans: and at (c) it was further defended, by a third and inner gate.

ARRIVED within this, we view a large ſtore room, taking up the whole of the ground-floor; and having no light but from narrow loops; the true mode of defending which ſeems not as yet to have been underſtood; although they were placed high up, and under great arches, at (iiii).

AT (d), and (e), are two circular ſtone ſtaircaſes, aſcending to the floor above. There is now alſo an additional ſmall brick ſtaircaſe, at (6), between the firſt gate and portcullis; but this is manifeſtly a late addition, made within a few years; and merely built within the body of the little tower, which it much fills up and incumbers; the inner area thereof being only about 10 feet ſquare.

AT (f), is the well for water, ſtill remaining entire.

AND Drake ſays there was alſo a dungeon, ſo dark as not to take in the leaſt ray of light; but its entrance is now blockedup.

AT (k k), were two fire hearths.

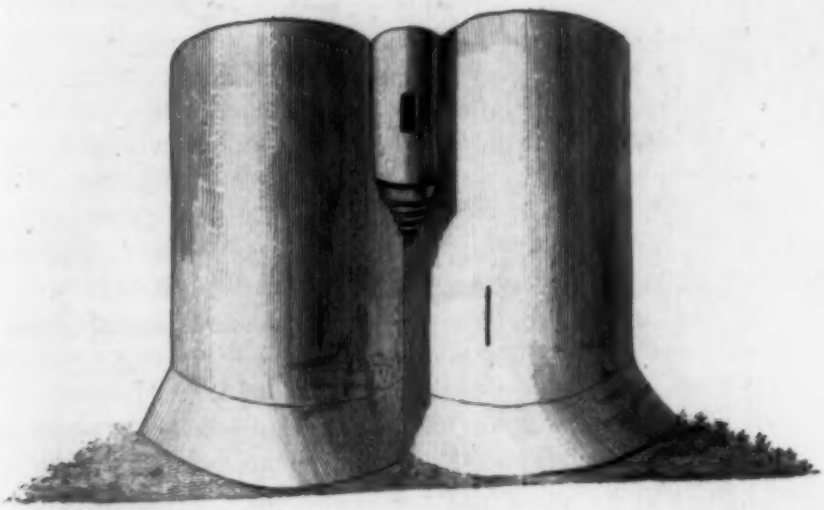
AT (g h), were two receſſes, or cloſets.

ASCENDING up the ſtairs (d) and (e), we come to the ſtate apartments; and here were large windows, but of a very ſingular conſtruction, as repreſented F. XXIII.

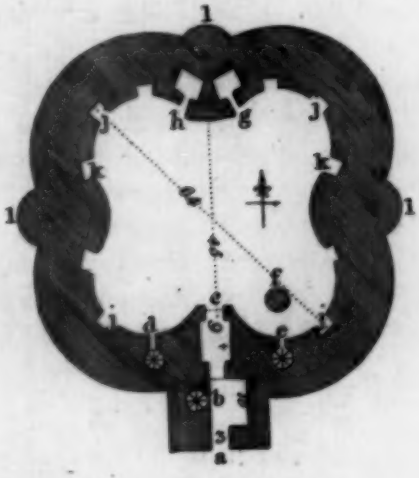
* Drake's Antiquities, p. 289.

AT

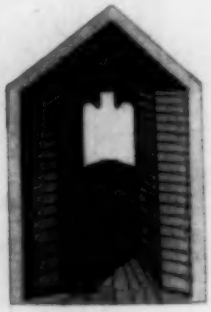
F. XXIV



F. XXII

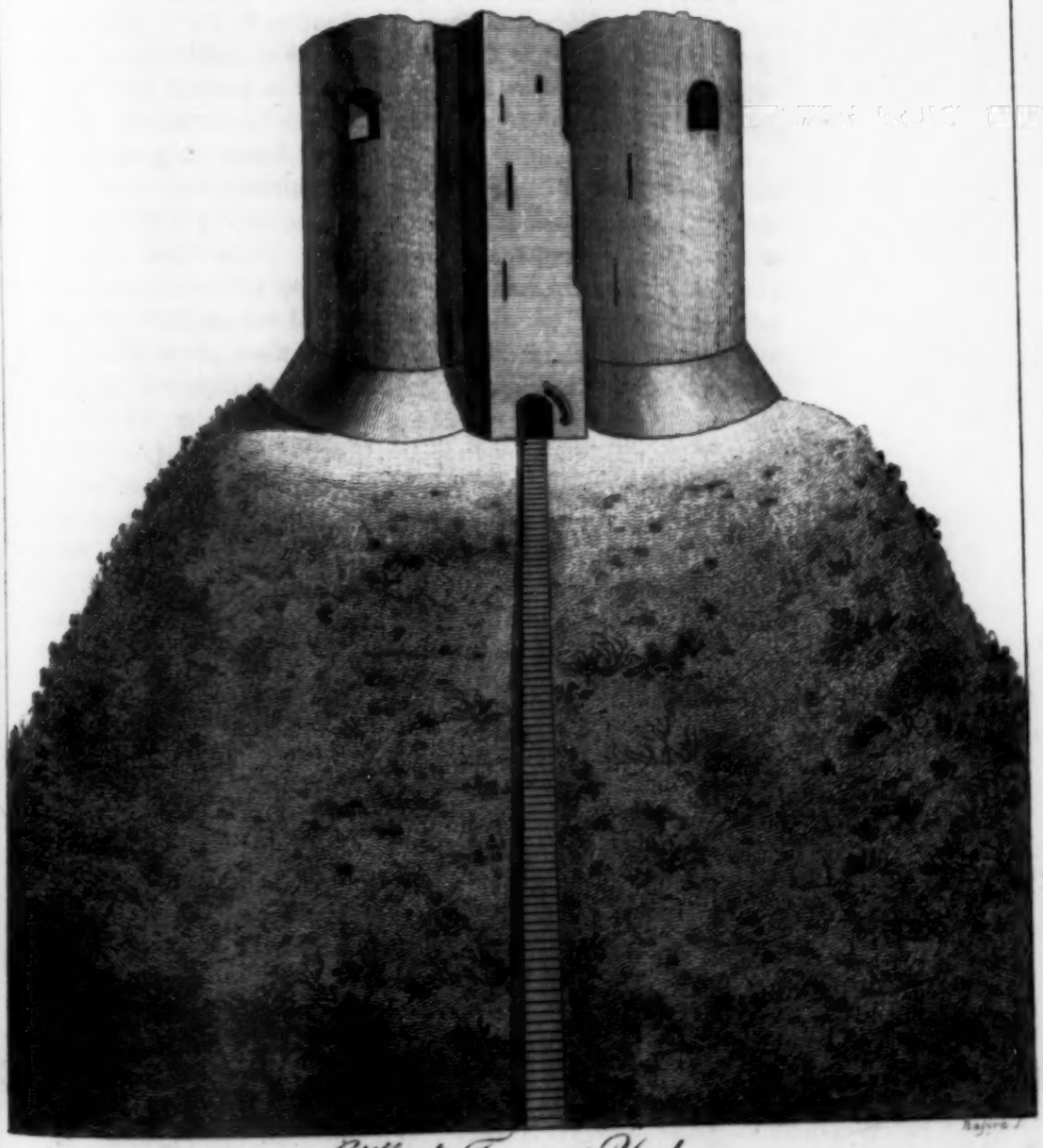


F. XXIII



Cliffords Tower at York.

F. XXV



Clifford's Tower at York.

At the interſections of the circular parts of the building, were three *hanging* cloſets as repreſented F. XXIV.

And at the fourth interſection, over the tower of entrance, there was a bed chamber; the outſide of which, with its narrow *ſafe windows*, is repreſented F. XXV. where alſo we may obſerve the manner in which both loops and windows were contrived, to command the drawbridge, and ſteep aſcent of ſteps, before the great portal.

Let us now examine Lincoln caſtle; built (as Stow informs us *) about the ſame period by the Conqueror: which account Camden confirms †; telling us, that Lincoln was, in the Norman times, one of the moſt populous cities of England; and that William the firſt, to ſtrengthen it, and to keep the citizens in awe, built a very large and ſtrong caſtle, on the ridge of the hill; and that many dwelling houſes (to the number of one hundred ſixty and ſix) were deſtroyed, for the caſtle.

The original magnificence of this city, may eaſily be conceived, from a circumſtance almoſt peculiar to it of all the cities in England; which is, the vaſt number of beautiful Saxon and Norman door-ways, conſtructed in the moſt finiſhed manner, and to be met with in every part of the ſtreets; and in the walls of what are now the moſt private houſes.

And the ancient Fortreſs here was by no means beneath the dignity of the place; which conveys to us very nearly the ſame idea of original Norman architecture, as that at York.

The *keep* was ſituated on an high artificial mount; this, however, was not (like the former) excluded out of the caſtle area; but the walls incloſing the whole circuit of the fortreſs were made to aſcend on each ſide the ſlope, and to join to the great tower: which was, in other reſpects, in conſequence of the ſteepneſs of the

* Stow's Annals, p. 109.

† Gibſon's Camden, p. 468.

hill,

hill, and its talus, equally inaceſſible, both from within the caſtle area, and from without, except by a ſteep flight of ſteps, and a drawbridge over a ditch; and was therefore almoſt as compleatly inſulated as that at York.

IT was nearly round; covering almoſt all the ſummit of the mount, like the preceding. But here, as at York, the great portal was ſtill *on the ground*; no ways elevated on the ſide of the wall; and protected only by the difficulty of acceſs, in conſequence of the ſteepneſs of the hill. And, indeed, ſo much was that ſort of ſecurity depended upon, that we here even find, moreover, remains of *two* great portals; one within the caſtle area to the SE; and one without to the N W: So that it is very plain (notwithſtanding the walls of the caſtle area adjoining to it on both ſides) that this Keep was conſidered (like the great tower at York) as a diſtinct, independent, ſtrong hold; equally tenable with the reſt of the caſtle, or without it.

AND hence we may account for a very remarkable circumſtance mentioned by lord Lyttelton (in his hiſtory of Henry IId)* that when this caſtle was ſuddenly attacked by king Stephen; and the town filled with his army, in order to inveſt it; (William de Raumara, earl of Lincoln, and his half brother the great earl of Cheſter, with their wives and families, being ſhut up therein), the earl of Cheſter *eſcaped*, at the *very inſtant* the king was entering the town, and got ſafe into Cheſhire; from whence coming again with a great force, he gave battle, and took the king priſoner. His eſcape from the caſtle, at firſt ſight, under ſuch circumſtances, appears marvellous; but we may eaſily underſtand how it was effected, by conſidering how diſtinct a fortreſs, from the reſt, the *keep* was made; and what an outlet it had, independent of the reſt of the caſtle, towards the country.

* Vol. I. p. 231.

AND

And indeed it is very well worth notice, conſiſtently with this idea of the independency of this part of the fortreſs, in what a *ſtrange manner* it was connected with the reſt of the building. For it is very plain the great portal, at (f), F. XXVI, towards the caſtle area, was not conſidered as forming any communication between the different parts of this ſtrong hold, except in times of peace and ſecurity: and that in caſe of cloſe ſiege, it muſt have been very little uſed; and muſt have been as ſafely ſhut up, and as ſtrongly defended, as that at (g) on the oppoſite ſide without the caſtle walls; both the one and the other being deſigned merely for ſtate and convenience, when a numerous retinue were conſtantly paſſing in and out, and an open court was here kept by the great perſonages uſually reſident on this ſpot.

But on the ſide, at (e), where a communication really was made with the reſt of the buildings of the caſtle, the utmoſt caution manifeſtly was obſerved; for here we find, going from the tower at (6) (which tower alſo is upon another artificial mount), the remains of a paſſage, or covered way, at (d), along the upper part of the wall, and leading to a flight of ſteps on the ſide of the keep. To our aſtoniſhment however, when we come to examine them, there is no *immediate* paſſage into the keep, nor could there ever have been ſuch; but they muſt clearly have aſcended, with many windings, towards the top of this great tower, and muſt then have deſcended again, through a ſtrong projecting and adjoining building, which appears at (h), before any entrance could be gained into it.

How the apartments above were finiſhed, cannot now be aſcertained; becauſe the walls, in the upper part, are deſtroyed: but it appears, that in the lower room there was not even one loop hole; and from the great dimenſions of the diameter of the room, it may be concluded the floors above muſt have been ſupported by pillars, placed in the circumference of ſome artificial well,

well, in the middle, as at York, for the purpose of affording air and light, and of drawing up machines of war and stores.

THE walls are above seven feet thick; and at (x), under the place of ascent from the covered-way, there is something like the remains of the mouth of a well; sufficiently protected by the great thickness and mass of walls every where adjoining.

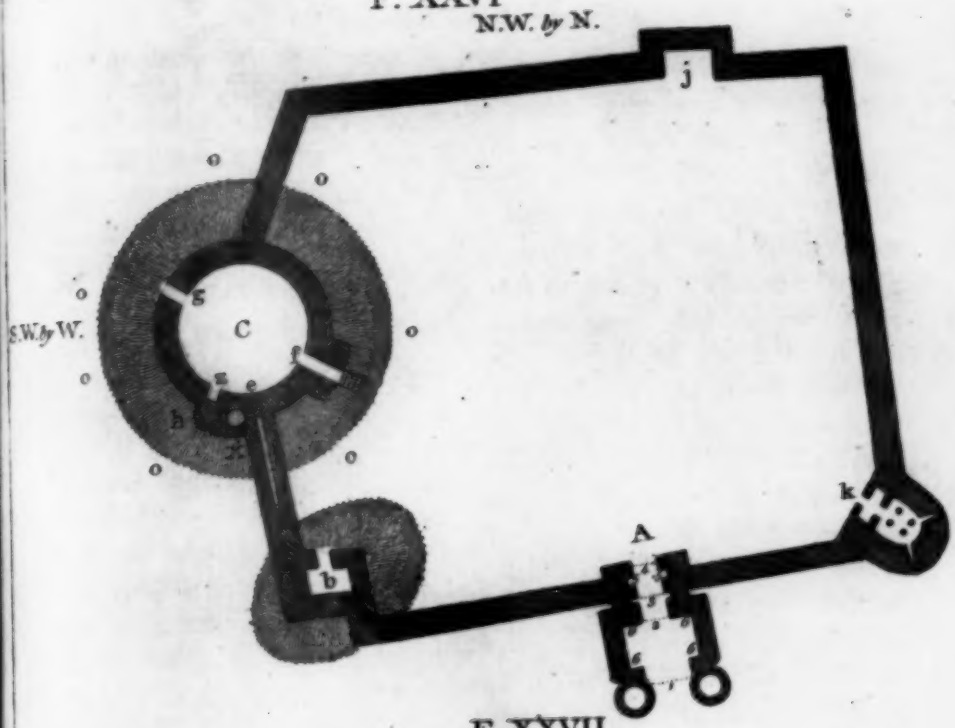
AT (z) appears to have been the door of the staircase leading to the upper part of the building.

AND (oooooo) shew the basis of the steep mount, whereon the keep is built; the height of which mount is very great.

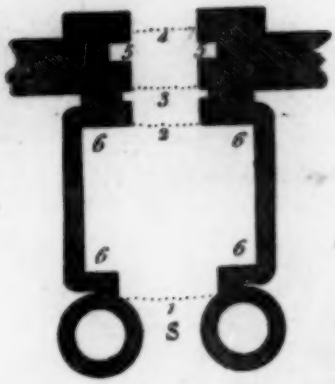
HAVING thus described the part of this building which is characteristick of the Norman times; I shall now proceed to describe as much of the rest as remains perfect; without any regard to the ages in which the several parts were constructed. Undoubtedly great additions were made, both in the circuit, and within the area, at different periods: and it is known to have been improved to its greatest degree of perfection in the time of John of Gaunt duke of Lancaster, whose chief residence it once was: but it is most remarkable, and proves the antiquity of the building, that he finding the situation too keen and cold, retired to a winter palace, that he built, in the lower part of the town; of which there are still some remains; remains that shew he was well acquainted with a style of building far different from that of the antient keepon the hill.

THE outer walls of this castle inclose a very large area. The approach whereunto was, and is, by a great tower from the city, at (A), the whole device of which is more exactly represented F. XXVII. where (S) shews the first great gate, standing between two small round towers; beyond which was a small court of guard (6666). At (2) was the second great gate, directly under the great tower. At (3) was the Portcullis. At (5) are remains of two seats, in niches, for wardours; and at (4) was the fourth great gate. There were one or two magnificent rooms above

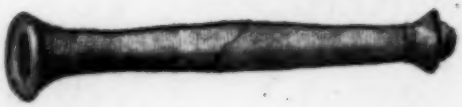
F. XXVI



F. XXVII



F. XXVII
2



Plan of Lincoln Castle.

above, in this tower; but no communication with them (as far as I could perceive) from the arched gate way beneath; the approach to them being from the walls within the caſtle.

In the corner of the area of the caſtle, at (k), is a moſt remarkable ſtrong and curious little building, appearing like a tower on the outſide; and now called *Cobs hall*; and uſed as a dungeon: but it manifeſtly was originally a chapel; having a fine vaulted roof, richly ornamented, and ſupported by pillars; and having a crypt underneath; and alſo a ſmall antichapel. The workmanſhip of the whole is exceedingly curious: and it is moſt particularly ſingular, that the pillars are ſo exactly placed over-againſt the loop holes which afford light, as to be a protection againſt any miſſive weapons that might be thrown in.

At (i) are remains of another turret; under which I am informed, by Sir Henry Englefield, is a curious Saxon, or rather a Roman arch, appearing to have been a ſtill more ancient entrance than that at (a) either to ſome original fortreſs in this place, or perhaps to the old city; but as it is not viſible on the inſide of the caſtle, in conſquence of a mount placed in this part, it eſcaped my obſervation. Theſe are all the fragments of the original building that now exiſt.

I cannot, however, quit the mention of this curious place, without taking notice of ſome very extraordinary *earthen pipes*, found in its neighbourhood, and faſtened by joints; one of which was ſent to me a year or two ago by Sir Joſeph Banks, preſident of the Royal Society, which I now lay before the Society of Antiquaries.

It is one foot ten inches long, and between 2 and 3 inches in diameter within; but by no means regularly circular.

These pipes lay in a direction leading ſtreight, from the caſtle, to an outwork called *the Lucy tower*, at the bottom of the hill, ſtanding by the ſide of the great antient Cut called *Carauſius's Ditch*. They were therefore ſuſpected to have formed

a communication, for ſome purpoſe or other, and poſſibly for the conveyance of ſound. But I will not preſume to decide any thing concerning them; as they might perhaps be deſigned for the conveyance of water, though ill ſuited for that purpoſe on account of the want of cloſeneſs in the joints. There is certainly a ſpring in the high ground between this tower and the caſtle, and they might poſſibly be part of ſome conduit from thence.

WHETHER they were any part of the conduit mentioned by Leland, I am not able to determine; for want of greater accuracy in *his* deſcription. His words are *, "There is another "new caſtelle of conduit hedde, *trans Lindum flu*: and booth "theſe be ſervid by pipes derived from one of the houſes of "Freres, that were in the upper part of Lincoln."

WHATEVER they were, their form and ſubſtance, and manner of being *glazed*, is very odd, and curious; and therefore I venture, in this ſhort digreſſion, to make mention of them, and to repreſent one of them. (Fig. $\frac{17}{1}$)

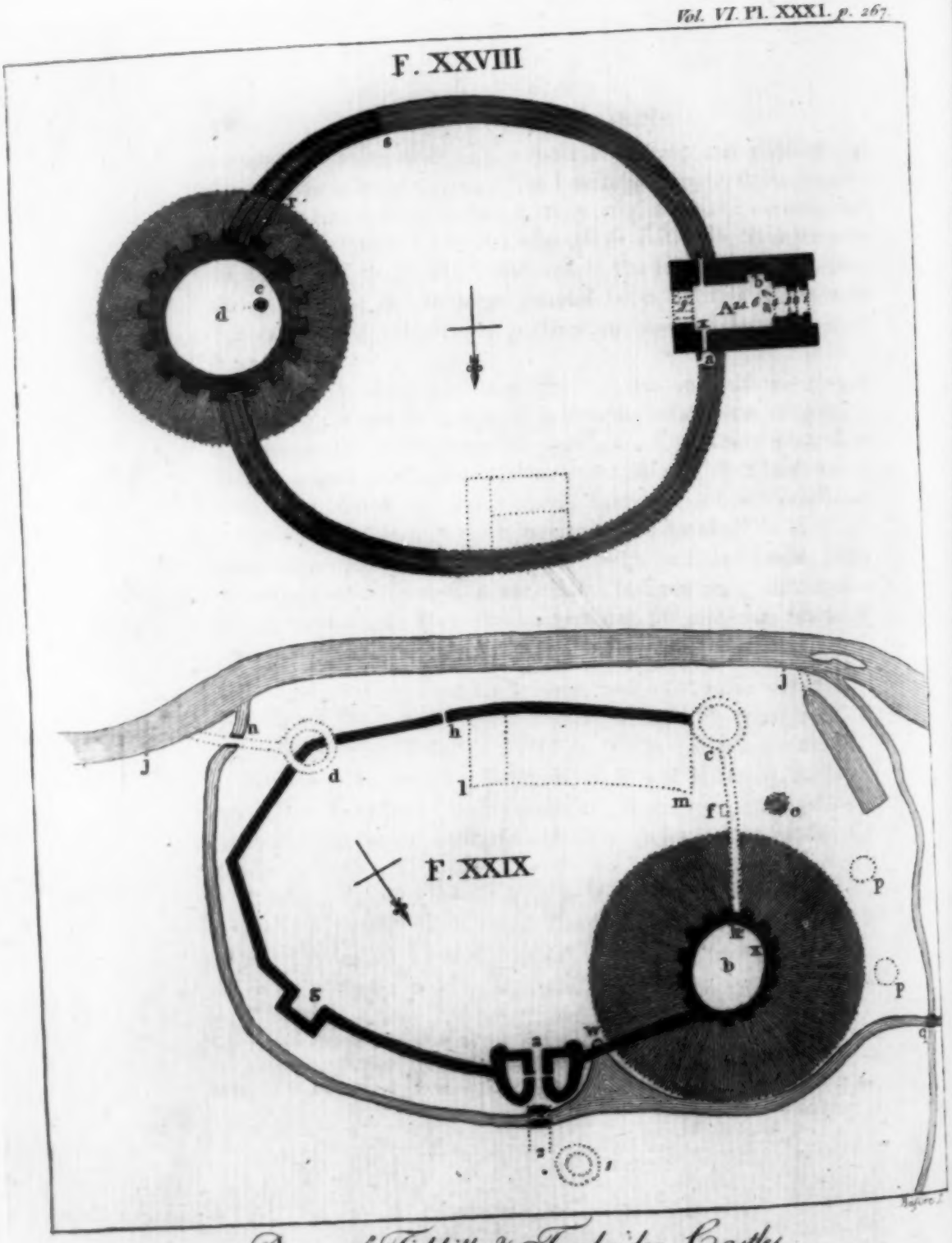
THE next caſtle of the Conqueror, and alſo of the *earlieſt* part of his reign, that deſerves our notice, in order to confirm what has been ſaid, is *Tickhill* in *Yorkſhire*, a place of great renown.

IT was given, by King William, to Roger de Buiſly, with 49 manors in Yorkſhire; and the edifice, from every circumſtance attending it, ſeems moſt undoubtedly to have been erected by him.

ALL that Camden ſays of it only this; "ſcarce five miles from "Doncaſter, to the ſouthward, ſtands a place which I muſt not "paſs by, called Tickhill, being an antient town, and forti-"fied † with an old caſtle, which is large; but barely ſur-

* Leland's Itinerary V. I. p. 34.

† I cannot but here remark a great inaccuracy in the editor of Camden's Britannia, who ſpeaks of *the town being fortified by an old caſtle*: as if the caſtle was "rounded



Plans of Tickhill & Tunbridge Castles.

"rounded with a ſingle wall; and by a huge mount, with a "round tower upon the top of it. It was of ſuch dignity "heretofore, that all the manors hereabouts appertaining to "it were ſtiled The Honour of Tickhill. In Henry the firſt's "reign, it was held by Roger Buiſly; but afterwards king Ste-"phen made the earls of Ewe in Normandy lords of it. Next "king Richard the firſt gave it to his brother John. In the "barons war, Robert de Vipont took and detained it, till "Henry IIId. delivered to him the caſtle of Carliſle, and that "country, upon condition that he would reſtore it to the earl "of Ewe: but upon the king of France's refuſal to reſtore "the Engliſh to the eſtates they had in France, the king diſ-"poſſeſſed him again; John earl of Ewe ſtill demanding reſti-"tution of it from king Edward the firſt, in right of Alice "his great-grandmother. Laſtly, Richard the ſecond, king of "England, gave it to John of Gaunt duke of Lancaſter *."

In the remains of this caſtle again we find the ſame Daniſh ideas preſerved; and much the ſame kind of plan as in the two preceding.

An high artificial mount †, with a round keep at the top covering nearly the whole of the ſurface, are the characteriſtick parts of this fortreſs.

built for the protection of ſuch an inconſiderable town, inſtead of the town being built (as was really the caſe with all ſuch towns) as an appendage to, and in conſequence of the erection of, the caſtle.

* Gibſon's Camden, p. 707.

† In this ſingular circumſtance the Norman caſtles, built on the top of artificial mounts, erected by their chieftains, differ from ſuch of the prior Saxon caſtles as were built (like that at Norwich) on great mounts, or ancient barrows of ſtill earlier date; for the caſtle at Norwich (for inſtance), though ſo much larger than any of theſe, covers but a very ſmall part of the hill on which it is built, and has a great plain area, left on the top of the mount, adjoining to it, and ſurrounding it; whereas the true Norman caſtles cover nearly the *whole* area of the ſummit of the reſpective hills on which they are ſituated.

The whole plan is represented Fig. XXVIII. where (A) shews the situation of the great tower of entrance; having originally a great gate at (1): a portcullis at (2); a second gate at (3); a third gate at (4) and a fourth gate at (5); but as the part at (1), is of late and recent workmanship, it is not at all improbable but that there might moreover have been originally a *court of guard*, and two small round towers before this gate, as at Lincoln.

In the upper part of this tower was an handsome room: to which, however, there was no approach *from within* the gateway beneath; but the access was by a winding staircase, at (a), within the area of the castle, entering above, at X.

This room was 24¼ feet, by 21 feet 7 inches; and had a fire place at (b); and a large window at (5) over the inner gate; where a still larger window was placed, in latter times, about the reign of Elizabeth, or James I: but it had no window at all, *externally*, over the outward gate.

At (c) was a door leading to a passage, on the top of the wall, going from hence to the keep (d); which was itself round; and built on the summit of an high round artificial mount, the top of which it very nearly entirely covered.

The foundation walls of this keep, which was like that at Lincoln very large, are still to be seen, and traced very plainly, under the turf; and also the place of *a well*, at (e), may be discerned.

From hence was a steep flight of steps, and another covered way, toward (N); where stands a modern house; but where also are remains of very ancient buildings; which, however, appeared to me to be of much later date than the keep and original part of this fortress.

The part of the wall of inclosure marked with dotted lines has long been pulled down. And the part (SC), forming the communication between the tower and the keep, was destroyed very lately,

ly, by Mr. Berridge the preſent poſſeſſor; who very obligingly gave me much information with regard to this building; and ſhewed me, with great exactneſs, all the foundation walls of the keep; to which the aſcent, even from the covered way, on the top of the wall, muſt have been very ſteep, and therefore moſt eaſily defended *.

He alſo did me the favour to communicate to me a copy of a very curious ancient inſcription; which I afterwards read, on a braſs plate, in the old church, at this place; and which I here inſert, on account of its ſingularity, and relation to this caſtle.

Hic jacet Wills Eſtfeld quondm Seneſcallus de dominio de Holderneſſe ac de honore de Tykhill cū dña Philippa Regina Angl. ac de dominio de heytfeld cū dño Edmundo Duce Ebor. ac m̄garita uxore ejus qui quidem Willm̄s obiit xxiiii° die menſis Decembris Anno dñi Millm̄o cccLxxxiii° Cujus aīe ꝓpicietur dē. Amen.

Tunbridge is the laſt caſtle I ſhall mention of the *original* Norman ſtyle: as it was indeed one of thoſe *laſt built*: but I ſhall give a full deſcription of it; becauſe of the great improvements *here* introduced, in the tower of Entrance, in a ſubſequent reign.

* There is a curious print, from an old drawing, of the ancient appearance of Tickhill caſtle, with its keep ſtanding, amongſt thoſe publiſhed by the Society of Antiquaries; but though it ſerves to convey a tolerable idea of what muſt have been its general form, yet it is manifeſtly devoid of all true proportion; repreſenting the mount ſmall in compariſon of the tower itſelf; whereas it is in truth a very high hill: and it muſt have been inaccurate alſo in other reſpects; ſhewing the tower of entrance to have been of a different ſhape from what it ever could have been, and placing two large windows in it, on the outſide, where there neither are, nor ever were, or could be any.

THIS great gate, or Tower of entrance, in this noble pile, was erected long after the first construction of the fortress; and contains more convenient apartments, for the residence of a Commander in chief, than are to be met with in any of the original buildings of the age near the Conquest.

WE have *here* a specimen of the first beginning of those kind of additions, and of those remarkable alterations made at various times, in these strong holds; which, if not carefully attended to, may easily mislead an unwary observer, and occasion confusion in his ideas of the modes used and adopted in different ages.

TUNBRIDGE castle, Camden informs us, was built by Richard de Clare, (about the time of William Rufus) who got it, by exchange, for Briony in Normandy*; his grandfather Godfrey having been natural son to Richard the first duke of Normandy, and made earl of Ewe and Briony. After a long contest about Briony he, in recompence for it, took the town of Tunbridge, in England; on which occasion the *Lowy* of Briony was measured with a line, and he received an equal quantity of ground at Tunbridge, measured by the same line; his successors, earls of Glocester, however, held the manour of Tunbridge of the archbishops of Canterbury, upon condition that they should be stewards at the installments of the archbishops, and should grant them the wardship of their children.

SUCH is Camden's account; but Philipot's is more explicit: he tells us plainly, that the earl of Briony was an earnest abettor and supporter of the designs of William Rufus upon his brother's territories; in consequence of which Robert duke of Normandy made war upon him; depredated the earl's estate; and utterly subverted the castle of Briony; which was there-

* Gibson's Camden, p. 191.

upon

upon left an heap of ruins. William Rufus, therefore, commiſerating his calamitous condition, granted him as much land at Tunbridge, as would ſpread into a league in length and breadth. And *Gemeticenſis* reports, that he brought over the rope, with which he was to meaſure his new poſſeſſion, in the ſame ſhip which tranſported him and his retinue *.

The accurate Lambarde indeed †, gives us an account of the particulars of this tranſaction ſomething different from either of the foregoing; but yet ſuch as, upon the whole, may fairly lead us even to the ſame concluſion, with regard to the building of this caſtle by Richard earl of Briony.

And although it be true, that Lambarde himſelf gueſſes otherwiſe, and ſuppoſes the Keep to have been erected by *Odo* biſhop of Baieux ‡; (in which I think he is miſtaken) yet even that ſuppoſition would not invalidate what is here advanced, with regard to the *nature*, and *æra* of this fortreſs; ſince it only places its date ſtill nearer to the time of the conqueſt, and makes it appear ſtill more ſtrongly an original Norman pile.

We have here, therefore, at Tunbridge, in either caſe, a caſtle built by a Norman, almoſt inſtantly on his removing himſelf hither from his own country: and if the earl of *Briony* was the builder (as I apprehend he really was,) moſt avowedly on the very plan of his former reſidence. And accordingly this fortreſs has all the outlines of what I have hitherto conſidered as the *firſt*, and moſt *original* Norman caſtles.

The entrance was by a ſtrong tower, defended by a drawbridge, and a deep ditch; from the upper apartments of which tower there ſtill may be traced, very diſtinctly, the remains of a covered way, leading to a round Keep, that was ſituated (like

* Villare Cantianum 343. † In his Perambulation, p. 425.
‡ P. 442.

thoſe already deſcribed), on the ſummit of an high artificial mount.

THE walls of this building are ſtill in part remaining; and diſcover far more of its nature and deſign than thoſe at Tickhill: and nothing can be more obvious, than that a conſiſtency with the original plan and general device has been preſerved, in the very re-edification of the tower of Entrance; and in the communication formed between it and the Keep; although the former be a building of ſo much later date, and ſo much more compleat, than any of the older ſquare towers of Entrance hitherto deſcribed.

THE refinements, which the progreſs of arts introduced, ſoon cauſed the lords, who poſſeſſed theſe kind of caſtles, to begin to conſider the reſidence in the round Keep (except merely in time of ſiege,) as a mode of dwelling not ſo eligible as it had appeared to their haughty anceſtors. The large open well in the centre, probably began to be thought uncomfortable; and therefore induced them to prefer more convenient and pleaſant apartments, conſtructed in that other part of the fortreſs; where before they had been contented with one ſingle room, for ſtate. From hence, however, they ſtill took care to leave a ſafe retreat to the antient Keep itſelf, in caſe of neceſſity: to which they might retire whenever a cloſe ſiege commenced.

THAT the *great tower* of the caſtle at Tunbridge, in conſequence of this improvement, was conſidered as rendering this fortreſs a more commodious place of reſidence than many others; and that it was preferred, as ſuch, in the time of Henry III. (in the early part of whoſe reign this tower of Entrance ſeems, from the ſtyle of architecture, to have been built) appears from a judicious obſervation of Philipot's; who tells us, that in 1263 Henry III. beſieged Tunbridge caſtle, and forced it to ſurrender at diſcretion; and therein found, amongſt others, the *Counteſs of Glouceſter*. From whence (ſays he)

he) it may be inferred, *that in thoſe times, it was eſteemed, if not the only, yet at leaſt a principal manſion of thoſe great Lords of Tunbridge, the Earls of Glouceſter.*

I SHALL now proceed to deſcribe the whole of this extraordinary caſtle; which is indeed one of the nobleſt and moſt perfect ſtructures of the kind, of any at preſent remaining in England. But I cannot forbear previouſly to make all due acknowledgements to my reſpectable friend Mr. Hooker, the worthy proprietor of this princely poſſeſſion, who preſerves the remains of it moſt cautiouſly, and has diligently examined every part with the utmoſt care; in conſequence of which he has greatly aſſiſted me, in my enquiry; correcting my drawings; affording me much additional information; and enabling me to form a more preciſe judgement, with regard to every part.

FIG. XXIX. is a general plan of the whole area of this Fortreſs; to which there were great outworks, with ſeveral deep ditches, extending to a conſiderable diſtance into the country, and having fine contrivances of ſluices, and locks, for filling them with water; the latter being brought not only to ſurround the whole caſtle, but to waſh the very foot of the great tower of Entrance.

AT (1), juſt beyond the ditch, was a round tower, now deſtroyed; whereof the foundations do, however, ſtill remain under ground, and which ſerved as a *Barbican* to defend the approach.

AT (2) was a drawbridge; ſo contrived, as when drawn up to reſt againſt the front of the caſtle, and to cloſe the entrance compleatly. The foſs, in this part, has been filled up within theſe eight years; but I well remember the whole open: and have authority to add, that on digging at the bottom were found remaining the foundations of two piers, which ſupported the bridge; and which were conſtructed in a very remarkable manner, the ſtones being laid in pitch, mixed with hair, inſtead of mortar.

(a) Is the great tower of Entrance.

AND (b) is an high circular mount, rising seventy feet above the present area of the castle; and an hundred feet above the bed of the river: its base forming a circle containing almost exactly an acre of land. On the top of this is situated *the Keep*, of an oval form; its longest diameter without, being eighty-six feet; and its shortest seventy-six feet; and its longest diameter within, being about sixty-four feet, and the shortest fifty feet: so that the walls must have been, in some parts at least, about eleven or twelve feet in thickness *.

AND it appears from these dimensions, that there must have been a well, or small open area in the centre, with pillars, or arches round it, both to support the timbers from the side walls, and also to afford air and light.

THE mount has been discovered, upon examination, to have been formed manifestly of earth dug out of the great ditches, and trenches, which surround the castle, and from the present bed of the river. And to prevent such an enormous mass as the Keep, when reared upon such new-made ground, from having any dangerous or irregular settlement, its walls were constructed in a very singular manner; for they were not only of great thickness, and supported by strong buttresses; but compacted with timber, wrought up in their substance. It even appeared (upon pulling down some of the ruins, on purpose, a few years ago) that at what must have been about the height of one third part of the building from the ground floor, there

* I took the inward diameters myself, with as much accuracy as possible; but the area being now planted with fir trees, it is very difficult to hit precisely upon the longest and shortest diameters, and there may therefore possibly be some error in the dimensions; as I suspect there is, because the walls are, in some places, not above five or seven feet in thickness, leaving out the buttresses; but the error cannot be considerable.

was

was a continued range of timber, by way of curb, wrought up in the midſt of the ſubſtance of the wall all round; ſo that whatever ſettlement there ſhould be, at any time, in the ground, the whole muſt regularly ſettle together, or not at all. It is to be obſerved, however, that the ground, both within and without the area of this building, has been raiſed conſiderably above the original floor; and that the upper part of the wall is now deſtroyed.

To this keep there were two moſt extraordinary and well-protected approaches, from the other parts of the fortreſs; of ſuch a kind, as to deſerve the moſt minute deſcription.

The one I examined myſelf. It is a covered-way, from the upper part of the tower of entrance, at (a), along the top of an high wall, which joins that tower to the keep, at (b): but where it terminates, at the keep, (like that at Lincoln) it never entered, either upon the ground floor, or even upon that next above; but (as appears moſt manifeſtly from the ruins ſtill remaining) went up, with a very ſteep aſcent, quite to the ſtate apartments, at the top of this building.

The whole nature of it may more fully be underſtood by Fig. XXX. where (a) repreſents the tower of entrance; and (b) the lower part of the walls of the keep, and the top of the mount, now remaining.

At (d) is the arch, leading from the tower down to the top of the wall; which appears manifeſtly to have been ſecured by a ſtrong portcullis, and an iron door.

From (d to e) is the covered-way.

At (e) is the foot of the exceeding ſteep flight of ſteps, aſcending from thence to (f); but in ſuch a manner, that it is manifeſt they neither ended there, nor could have entered the keep, at (f); nor indeed till they got a conſiderable way

above the prefent ruins; where we may be affured there was a door-way, at leaft as well fecured as that at (d); and fo contrived, that on any emergency all communication might eafily be cut off, even from this covered-way.

THE wall of communication is confiderably higher, on the *outfide* of the caftle, than within; which latter is the fide here repreferted. The ground without is even lower by 26 feet, in this part, on the outward north fide of the wall, than within on the fouth: and the buttreffes, at the bottom of the outward front of the tower of Entrance, fpread out, till they nearly meet the continuation of the foot of the mount, under (w); in which fpot was an open arch, that let the water in from the outfide ditches, to a well, at (c). And upon the top of the wall, over this well, appear marks of there having been a projecting framework of timber, made for the purpofe of drawing up water, on either fide, to fupply thefe two buildings. I make no doubt, however, but that there was alfo a well of water within the body of the Keep itfelf, *here*, as at York, for the fervice of the garrifon, in cafe of a clofe fiege.

IT has been fuggefted, that the ground within the caftle was formerly much lower than it is now; fo as to afford a free paffage to the water, through the arch, under (w), to fome ditch running round the foot of the mount; but I can hardly think the fact to have been fo in reality, becaufe the great gate-way of entrance, under the tower, feems ftill as lofty as ever it was originally: and unlefs all the ground was lower, the ditch within the caftle muft have been unufually and unneceffarily deep; even much deeper than that on the outfide of the walls. To which I may add, that fuch an arch, fo left open, would (notwithftanding any grate that might have been placed in it) have been too dangerous, and too weak a part, to have been fuffered in fuch a ftrong fortrefs as this was manifeftly intended to be; whereas, from an arch placed merely at the bottom of a narrow

narrow pipe of a well, at (c), of at leaſt 26 feet in depth, there could be no danger at all.

THE other extraordinary approach to the Keep is now in great part deſtroyed; but I was fully informed of the nature of it, by Mr. Hooker, who formerly very carefully inveſtigated it.

THIS was, from a great round tower (whereof the foundations only now remain underground) at the weſt corner of the area of the caſtle, at (c) Fig. XXIX. From this tower it came, as a covered-way, upon the top of the wall, about half of the intermediate diſtance towards the Keep, as far as (f); where was a ſteep deſcent, by ſtairs, to a ſquare ſubterraneous vault, ſtill remaining moſt perfectly entire: and from thence was a ſubterraneous aſcent (the arch of entrance to which alſo ſtill remains); and the whole then went up (ſomewhat like that paſſage which is called Mortimer's Hole * at Nottingham), to the ſummit of

* I have myſelf gone quite down, from the ſummit of the mount, to the bottom of this paſſage, at Nottingham; from whence it is well known there was moreover a ſubterraneous ſally port; but whether there was any ſuch here at Tunbridge I cannot pretend to ſay poſitively; I rather ſuſpect, however, that there was; becauſe, at ſome diſtance without the walls, at (o), have been diſcovered remains of a ſtair-caſe underground, to which it might poſſibly lead.

The account given, by Stow, of the manner of ſurprizing and ſeizing Mortimer Earl of March, in the beginning of the Reign of Edward III. by means of the ſubterraneous paſſage which I refer to at Nottingham, is curious enough to deſerve being inſerted on this occaſion, as a further illuſtration of the nature of theſe devices.

"Upon a certain night, the King lying without the caſtle, both he and his "friends were brought, by torch-light, through a ſecret way underground, begin-"ning far off from the ſaid caſtle, till they came even to the Queen's chamber; "which they by chance found open: they, therefore, being armed with naked "ſwords in their hands, went forwards, leaving the King alſo armed without the "door of the chamber, leaſt that his mother ſhould eſpy him: They which en-"tered in, ſlew Hugh Turpinton, knight, who reſiſted them; maſter John Nevell "of Horne, by giving him his deadly wound. From thence they went toward "the Queen-mother, whom they found with the Earl of March, ready to have "gone to bed." Stow's Annals, fol. 229.

the

the mount; where it communicated only with the ſtore-room, or *lower* apartment of the Keep, and with a ſmall winding ſtair-caſe, within the ſubſtance of the wall, about (k); which latter appeared, from what remained of the ruins ſome few years ago, to have gone up directly to the leads, at the top, and to have had no ſort of communication with the ſtate-rooms, or any other of the intermediate apartments within.

As therefore the former covered-way was obviouſly deſigned for the uſe of the governor, or lord of the caſtle, and his immediate attendants; ſo, we may depend upon it, this latter was deſigned for the uſe of the ſoldiers of the garriſon; and was their common mode of approach, from the tower, at (a), and from their other *barracks*, where they lodged, ſo long as the area of the caſtle was preſerved from the hands of the enemy, and till they were more cloſely beſieged, and ſhut up in the Keep itſelf. Part of the ſteps of this aſcent were remaining in the year 1742. And from the ſtrange mode of entrance here made uſe of, we may perceive that all communication from without might even ſtill more eaſily be ſtopt, this way, than the former.

IN the buttreſs at (x), is the appearance of a ſquare pipe, forming a drain to the upper apartments.

AT (d), are diſcovered the foundations of another round tower.

AND at (g), are remains of a ſmaller ſquare tower, which ſeems to have had only two rooms one above another.

AT (h), was a ſally port, well conſtructed, and ſecured, with a flight of ſteps deſcending towards the river: and between (m) and (n) have been diſcovered foundations of a range of buildings; which I have good reaſon to believe were *mere additions*, made after the time of Edward the Iſt, and therefore ſhall give no further account of.

THE

THE walls ſurrounding the area of the caſtle are in general about ten feet thick.

AT (i i), is the river; but it did not run originally in the preſent channel, this latter being firſt made for it only at the time the mount was raiſed, which was in great part compoſed, moſt evidently, of ſtrata of earth dug out from thence: as the courſe of the river was then turned *, in order to render it a better means of defence to the caſtle.

THE great ditches ſurrounding the whole fortreſs, which were filled with water from the river, run very nearly in the directions repreſented in the plan.

FROM the corner tower (d), was a ſtrong wall, built acroſs the mouth of the laſt ditch, at (n), to keep the water to its proper height: and over this wall it found a paſſage, that formed a continual fall: whilſt the whole work was well protected, by its nearneſs to the adjacent tower.

AT (q), was another large and ſtrong *wear*; and from ſome foundations, diſcovered at (p p), it ſeems as if there was alſo a tower, or work, conſtructed *there*, in like manner, for its protection, that it might be as well ſecured as the former.

AT a little diſtance from this *wear*, to the weſt of the caſtle, began a bank, that was carried two miles up the country, through hills and valleys, to enable thoſe who had the care of the caſtle to fill the mote, at leaſt 14 feet above the level of the valley in its neighbourhood; which circumſtance (by the by) joined with thoſe others which I have already mentioned, convinces me ſtill more fully, that the ground, within the area of the caſtle, could never be much lower than it is at preſent: ſince, in the caſe here mentioned, when the water was ſo raiſed, on any approach of an enemy, it muſt have flooded all the baſs-court, by means of the arch in the wall between the tower of entrance and the keep.

* Of this Mr. Hooker informed me there are many unqueſtionable and authentic proofs.

To the north, in front of the caſtle, were two other ditches, at a conſiderable diſtance: the one dry, the other filled by means of the bank juſt mentioned; this laſt was very deep, and broad; and paſſed through the town, only at a quarter of a mile from the gate of the caſtle; where (from ſome piles dug up 40 years ago), there is the ſtrongeſt reaſon to believe there was a draw-bridge.

COME we now to the examination of the great tower of Entrance, which is one of the moſt curious ſtructures at this day remaining in England; and appears manifeſtly, from the ſtyle of its ornaments, to have been erected, either in the time of King John, or at leaſt in the very beginning of the reign of Henry III.

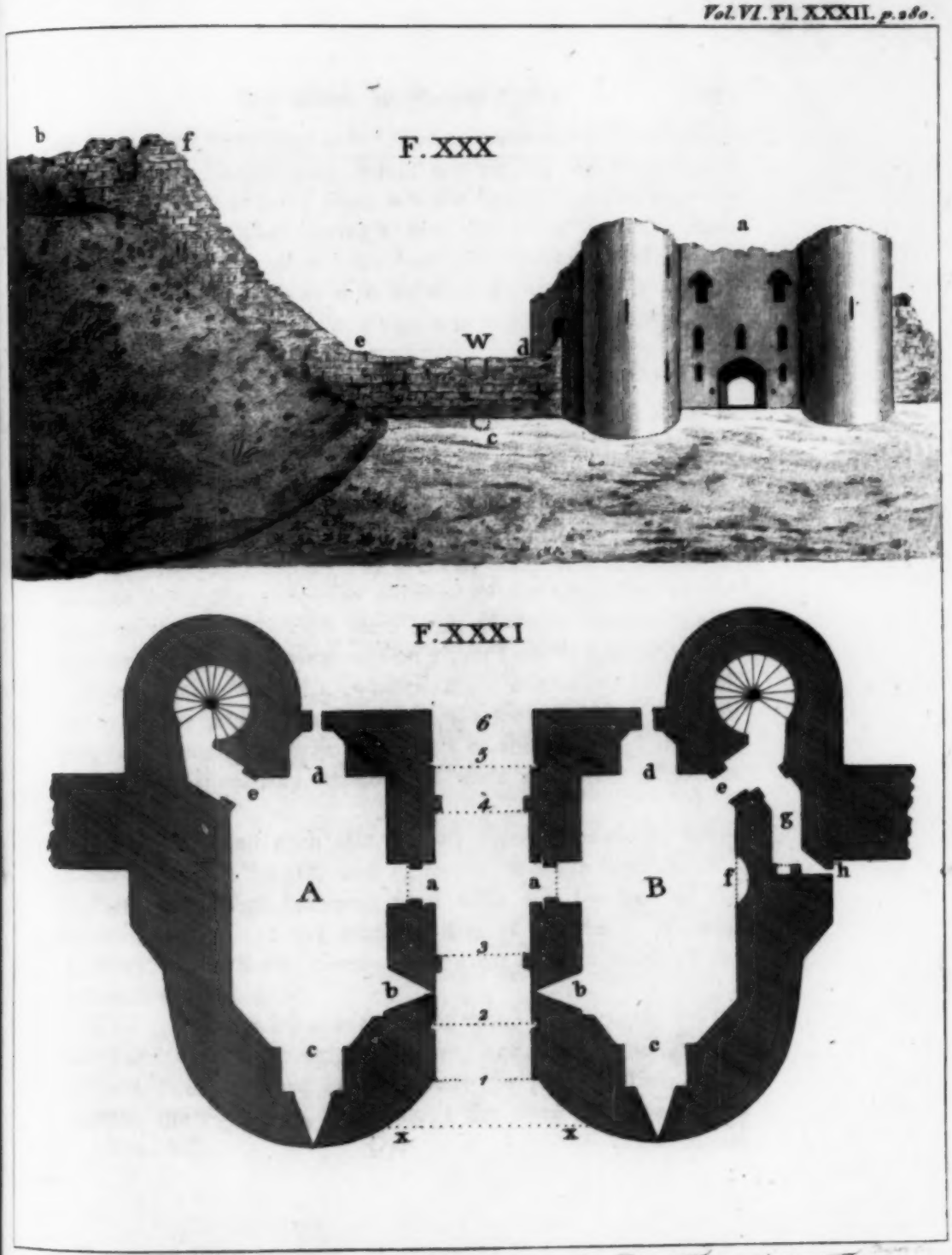
FIG. XXXI. is a plan of the ground-floor, and of the great portal, through which is a paſſage to the *Baſs-court* of the caſtle (or *Ballium*). I have before obſerved, that the water of the ditches, ſurrounding the caſtle, waſhed the foot of this tower: and at (xx), in the north front, is the part againſt which the draw-bridge was drawn up; compleatly cloſing the entrance; the places in the walls, on each ſide, worn by the timbers, being ſtill very viſible.

AT (1), appear alſo, on each ſide, in the wall, the places for fixing the windlaſs, to draw up the bridge: and over head, juſt beneath an arch at a vaſt height, are three *machicolations*, for pouring down boiling lead, and hot ſand, on any aſſailants; in caſe the draw-bridge ſhould at any time be torn down, and this firſt entrance be forced.

At (2), was an enormous portcullis; deſcending from another of the high arches, near the top of the tower.

AT (3), was a pair of ſtrong gates.

AND between the portcullis and theſe gates (that is, between (2) and (3), are three more machicolations, over head; placed under



Inside of Tunbridge Castle, & Plan of the Ground Floor of the Tower.

under an arch ſomewhat lower than the former. Beſides which, there are two narrow loop-holes; one on the right-hand, and the other on the left; from whence any beſiegers attempting the ſecond gate (after having broken, or burnt the portcullis) might be wounded, even with ſpears, as well as by croſs-bows.

Between (3) and (4) is a larger area: the arch of which, over head, is perforated the whole way with rows of *machicolations*, placed at equal diſtances.

At (4) was another pair of great gates.

And at (5), was a ſecond portcullis; but not aſcending ſo high in the tower as the former: over-head, however, at (6), were *machicolations* again, as at the firſt entrance.

In the middle of the whole paſſage, on each ſide, at (a a) are two ſmall door-ways; four feet ſix inches in width: they were each of them ſecured, firſt by a ſtrong portcullis, and then (as appears obviouſly from the narrowneſs and ſmallneſs of the grooves into which they were made to ſhut) by *iron* doors; and lead to the two apartments on either ſide the gate-way.

Even the inner walls, wherein theſe door-ways are placed, are five feet five inches in thickneſs: from whence we may judge of the vaſt ſtrength of the reſt of this building, in other parts: as it manifeſtly appears the walls are much thicker in many places.

The rooms, on each ſide, are of equal dimenſions, being about 28 feet in length, and 15 feet 9 inches in breadth.

And the paſſage between, from what was the foot of the draw-bridge, to the end next the area of the caſtle, is about 40 feet; which ſhews clearly how great the thickneſs of the outward walls muſt be.

The gate-ways are about 10 feet wide. The room, on the left hand (A), had neither chimney, nor receſs, belonging to it; and ſeems to have ſerved merely for lodging ſtores. But that on the right (B), had a large fire-place at (f) and near

 adjoining

adjoining to it, in the wall, at (g), a recess, approached from the stair-case, which served for a privy, having a very small window, at (h), belonging to it; in the construction of which, it is not a little remarkable, how compleatly it is secured from the possibility of any weapons that might be shot in doing mischief.

IN both the apartments are loop-holes, at (c c): and, at (b b), those already mentioned; all of which are placed so high, that, although the soldiers, who defended the tower, might most easily annoy the assailants without, it was hardly possible for the latter to wound those within.

AT (d d), are two other loops, which being towards the inside of the castle, are made both wider, and in every respect larger, for the admission of air and light.

AT (e e), are two circular stair-cases, well constructed, and arched over head; both of them going quite to the top of the tower, but not descending any lower than this floor. They have, however, as you ascend, recesses, in the side walls, leading to the loop-holes, which are wonderfully well guarded.

These lower rooms were each 13 feet 6 inches in height.

FIG. XXXII. is a plan of the vaults underneath; having manifestly never had any way down to them, but by traps in the floors the rooms just described; and having neither light or air, but what was admitted by two very remarkable narrow sloping flues, opening to the air on the outside, at the height of 9 or 10 feet above the ground, and so small, that the one, marked (g), is only one foot by 10 inches; and the other, marked (h), only 6 inches by 5 inches in width.

THE walls, being thicker near the foundations, render these vaults rather smaller than the rooms above.

AT (i), is a reservoir of water, that has been made of late years, for a sort of cold bath; but, from its being so readily and con-

ſtantly ſuppled, we may conceive how eaſy it was to have had a well formerly in this ſpot; and may conclude that in all probability there actually once was one, either here, or at leaſt is ſome part near adjoining.

At (kk), are manifeſt remains of a ſtrong partition wall: and the floor, at (l), appears obviouſly to have been formerly ſunk much beneath the reſt; which indicates this to have been the place of the dungeon.

Fig. XXXIII. is a plan of the great apartments on the firſt floor above; being of juſt the ſame dimenſions as the rooms on the ground floor; only the height is no more than 11 feet 6 inches.

At (m m m m), are only narrow loops, there being indeed no windows at all, on the outſide of this tower, next the ditch.

But at (n n n), are three ſmall windows: one to each apartment, looking into the court of the caſtle; and in the midſt of the floor of the receſs leading to that in the middle, juſt over the inner gate-way, is the perforation of one of the machicolations.

At (z z), is an open groove for drawing up the inner Portcullis, through the floor; which was worked in this apartment: whilſt the grooves of the outer and greater Portcullis appear on the outſide of the wall, at (x x). And it may be remarked, that the whole boarding of the floor of this middle room (p), was obviouſly laid on looſe, with deſign to be taken up, occaſionally, in order to uſe the machicolations, formed in the great vaulted arch on the top of which it was placed.

At (o o), in the rooms on each ſide, are large fire-hearths and chimneys.

At (q q), are the doors leading to the two ſtair-caſes; the ſteps whereof are ſtill in excellent preſervation, and well wrought; but are every one of them eleven inches in depth; the cauſe of which great depth ſeems to have been, that they were ſo contrived, as to aſcend, *by one turn only*, from this floor to the

next; and so as to have the first step, at (7), and the last step of the turn at (8).

From the staircase, on the right hand, at (r), is a passage to a recess, or small room, formed in the thickness of the wall, exactly of the form and dimensions laid down in the plan, from whence, at (u), is a passage to an arched door way, at (t), which appears clearly to have been strongly secured, both by a Portcullis, and an Iron door, and led down to the covered way, on the top of the wall, that communicated with the keep.

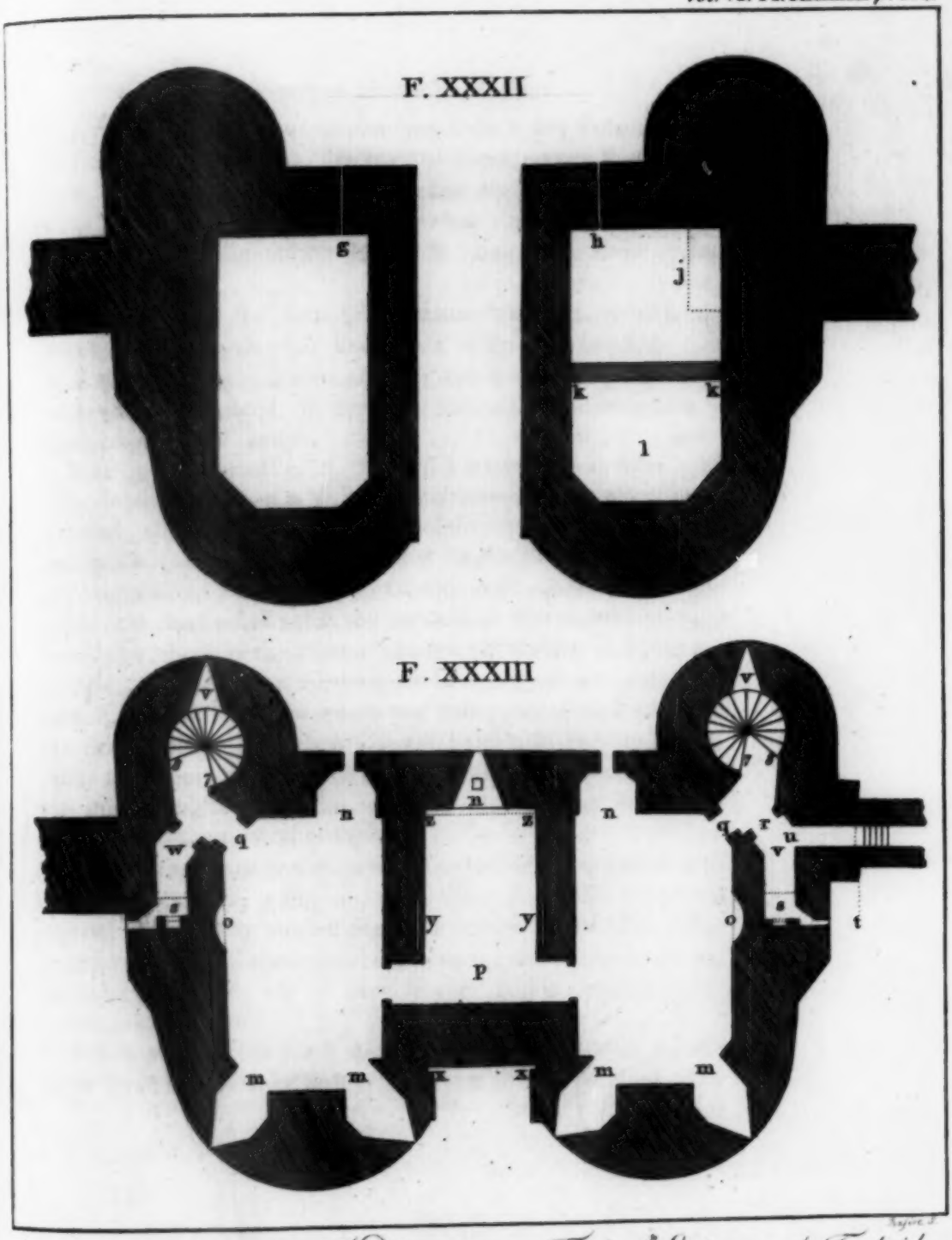
From the staircase, on the left hand, at (q), is another small passage, at (w), leading to a privy; of the same construction with that, on the opposite side, on the floor beneath: and at (yy) are the grooves for drawing up the small Portcullisses over the side doors.

Fig. XXXIV. Is a plan of the state room above; which appears to have been very magnificent, and of great dimensions; including the whole area of all the three rooms beneath. It is now indeed divided into three such apartments as those are, but the walls forming the divisions are mere modern erections, of very late years, raised (as the propietor informed me) on the top of the original ones in the lower floor, with a view to fit up a small room as a library; which design was afterwards laid aside.

At (z) is a large fire hearth, and chimney: and at (tt) are two very fine large windows, highly ornamented, in the style that began to be introduced in the time king John, and in the earliest part of the reign of Henry III; but they appear to have had no glass, and to have been fenced only with Iron bars, and wooden shutters; as is known to have been the usage in early times *.

* It must be in the remembrance of every one, who has had an opportunity to peruse the very curious old household book of the Northumberland family, that whenever the earl removed from Alnwick castle, to London, not only the *arras* was taken down, in all the rooms, but the *glass* was also carefully taken out of the windows.

At



Plans of the Vaults & of the First Floor in the Tower of Entrance at Tunbridge.

At (v,v,v,v,) are four narrow loop holes: but there is reaſon to think that the arches, leading to them, were ſhut up, as mere cloſets, behind the arras, except on particular emergencies; and that this noble room, when finiſhed and adorned, was no ways diſfigured by them. It was no leſs than 17 feet in height.

The beams of the floor (for greater ſtrength), were placed much nearer to each other than thoſe of the floor beneath: indeed they are hardly the width of a beam aſunder; and ſeem to have been intended, to ſupport occaſionally the weight of a great concourſe of people.

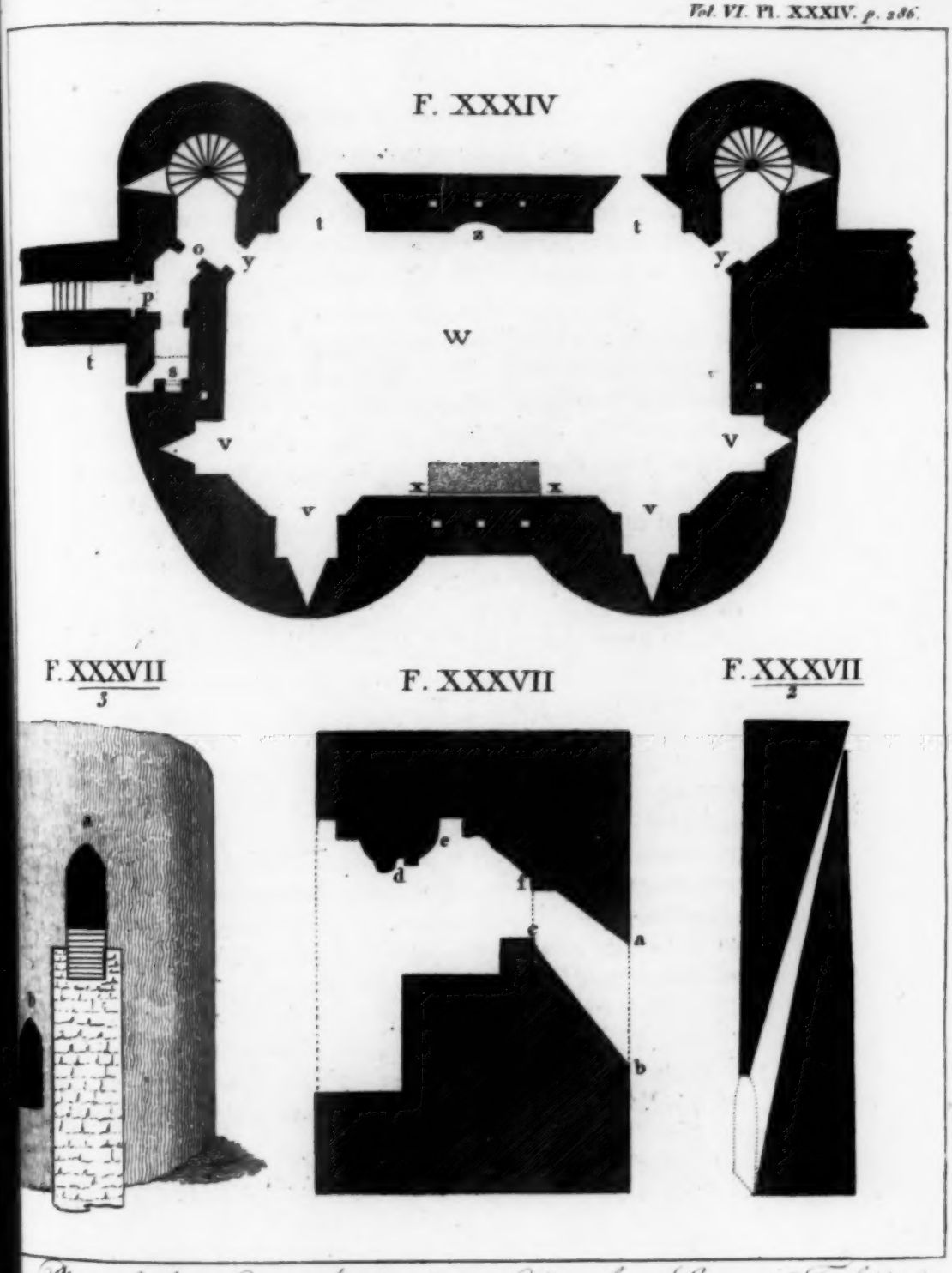
The great Portcullis, at the firſt entrance, was drawn up *here*, behind the arras, at (x x); but ſeems to have been ſo conſtructed, that when at its utmoſt height, it only juſt filled up, and made level, the cavity left for it in the floor. The dotted part adjoining, ſhews the top of the wall underneath, upon which the floor reſted; for, on account of the projection of the hanging arches, in the front of the tower, the flat wall, in the middle, was advanced further out here, than in the room below. The cieling of this room was ſtill more remarkable than the floor; being no leſs than 3 feet in thickneſs; deſigned manifeſtly to ſupport not only the lead of the flat roof, but moreover the great weight of baliſtas, catapultas, and other engines of war, placed there occaſionally.

In both the front and back walls appear the perforations of the machicolations, going up, quite through, to the top of the tower; where they were eaſily come at, by means of a *ſet-off* in the parapet wall above; and could with more convenience and advantage be made uſe of than if they had opened into the apartments beneath.

At (y y), are the doors to the two ſtaircaſes: that on the right hand merely led directly to the top of the building: but

from that on the left, at (o), is moreover a paſſage, leading to a ſmall room in the wall, of the ſame proportions and dimenſions as here repreſented; and from thence was a ſecond narrow paſſage, marked (p), leading to an arched door way, defended (like that on the oppoſite ſide, on the floor beneath) by a Portcullis and Iron door; and from this door way was an exceeding ſteep flight of ſteps leading down to a covered way, on the top of the adjoining wall, which communicated with the ſmall ſquare tower, marked (g) in the general plan.

And further, at the end of this paſſage room, was another arch, leading to a ſmall receſs ſerving for a privy, conſtructed juſt like the former. On which occaſion I muſt remark, that on the outſide of the tower, far underneath, appears a large arched door way, (anſwering to one exactly ſimilar at the oppoſite end of the tower) the uſe of which, at firſt ſight, is not at all obvious: they were both originally conſiderably above the level of the ground; and look in every reſpect, like ſmall ſide portals, as much as thoſe others above, defended by the Portculliſſes and Iron doors: and being placed on the outſide of the walls of the caſtle, (where, except theſe two large open arches, there are only loops) they give the tower a ſtrange appearance of injudicious weakneſs. But, odd as it may ſeem, they are found certainly, on examination, to have been deſigned partly for Deception, to miſlead an enemy by a falſe outſide; and principally to preſerve cleanlineſs; and for the ſake, firſt of concealing, and then of eaſily removing the ſoil and filth, from the eaſements above; and to prevent its diſfiguring the outſide walls of the tower, in ſuch a manner as was the caſe in many other caſtles, where the outlets to the eaſements were only loops. Within each of theſe doors is nothing more than a ſmall ſquare area, excavated out of the wall; the flues deſcending down to which, from above, are ſo well conſtructed, and ſecured, that from this contrivance there could not happen even the leaſt diminution of the ſtrength of the caſtle; whilſt at the ſame time, the



Plan of the State Apartment: & Section of a Loop at Tunbridge.

the external appearance to an enemy could only ſerve to occaſion a moſt ridiculous kind of deception.

THE ſituation both of the real door-way, and of the one for deception, on one of the ſides of the tower, (namely that towards the weſt) is repreſented Fig. $\frac{XXXVII}{3}$ where (a) ſhews the place of the former above the top of the wall, with the ſteps leading from thence down to the covered-way that goes to the keep; and (b) ſhews the place of the latter, which is one of the remarkable arches we have been ſpeaking of, on the outſide of the wall next the ditch. And I muſt add, on this occaſion, that it is by no means one of the leaſt remarkable things belonging to this fortreſs, where ſo great a number of perſons were to have their dwelling, what great care was taken throughout, to preſerve health and cleanlineſs.

BESIDES theſe in the tower, there were more than one *neceſſary*, in the ſmall tower at (g) Fig. XXIX; another at the top of the ſteps aſcending to the keep, at (b) Fig. XXX: and an whole row of them, on the wall, from (h) to (d); beſides one or two others between (h) and (c); every one of which were ſo contrived, as to caſt all filth out of the area of the walls, and to be eaſily cleanſed by means of the river.

I HAVE already mentioned, that there was a *ſet off* in the wall, on the leads above, at the top of the tower we have been ſurveying. The wall there is not of half the thickneſs that it is in all the apartments beneath: and by that means a walk and ſtation for the ſoldiers was formed all round. On aſcending theſe leads, the two circular ſtair-caſes ended: being covered in with ſtone arches at top: over which were formed platforms of lead. And over the top of the windows (t t) were two ſtreight ſtair-caſes, leading from the firſt leads, to thoſe two platforms.

IN the parapet wall, all round, were many loop holes: and from ſome appearance of remains of the lower parts of windows,

next

next the court of the caſtle, there is reaſon to ſuſpect, that there were alſo ſome ſmaller apartments conſtructed here: but of that I am not certain.

Fig. XXXV. repreſents the north front, and entrance of this great tower; remarkable for the high arches, hanging in a moſt magnificent manner, one within another, far above, over the portal, and containing the firſt machicolations, and groove for the Portcullis.

Within the ſecond ſet of hanging arches, againſt the letter (b), were the ſecond machicolations. And the loops of defence, are on each ſide, juſt where the figure of a man is placed.

There may be obſerved alſo two loop holes high above, for defending the approach to the entrance. And I have already mentioned, that there appear, in the walls of the towers, on each ſide, the places worn by the ends of the timbers of the drawbridge reſting againſt them.

Fig. XXXVI. repreſents the inner ſouth front, next the baſs court of the caſtle. The great windows of the ſtate room are richly ornamented; but the other ſmaller windows, though of the ſame form, are without the enrichments over head. In the gate way appear the over-hanging arches, one within another; but neither ſo many in number, nor ſo lofty, as thoſe in the other front. At (ii.) are the openings of the ſmall flues, in the wall, going down to the vaults beneath.

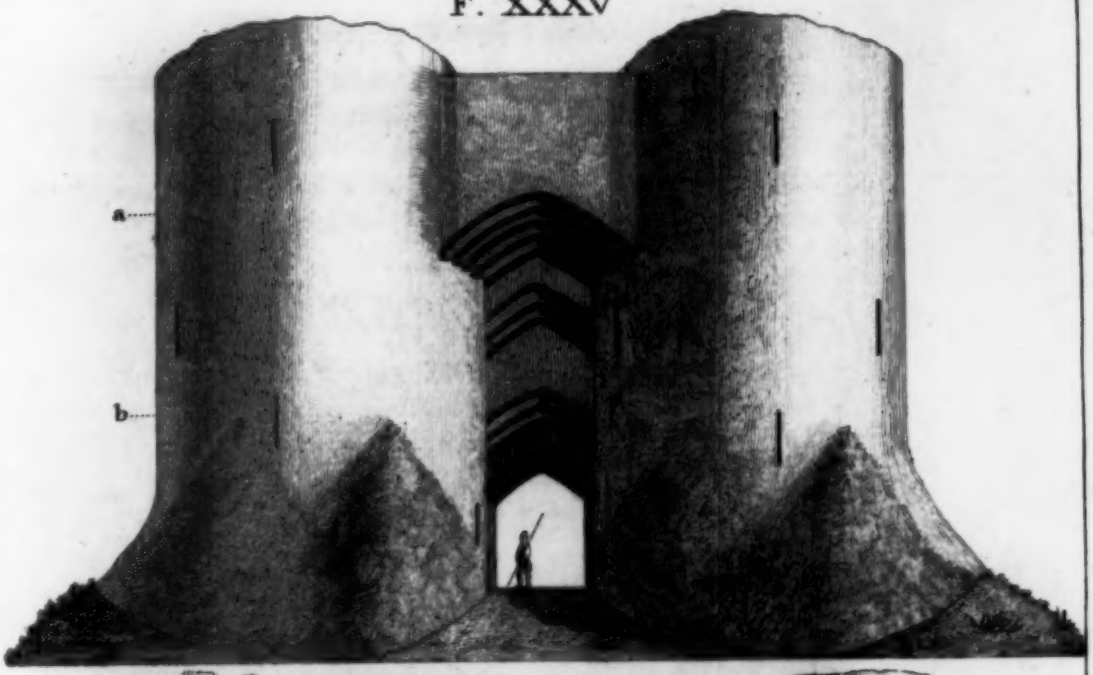
There remain only one or two things more to be obſerved, with regard to this extraordinary building; the great curioſity of which, has induced me to be more prolix and tedious, in the deſcription of it, than I could have wiſhed.

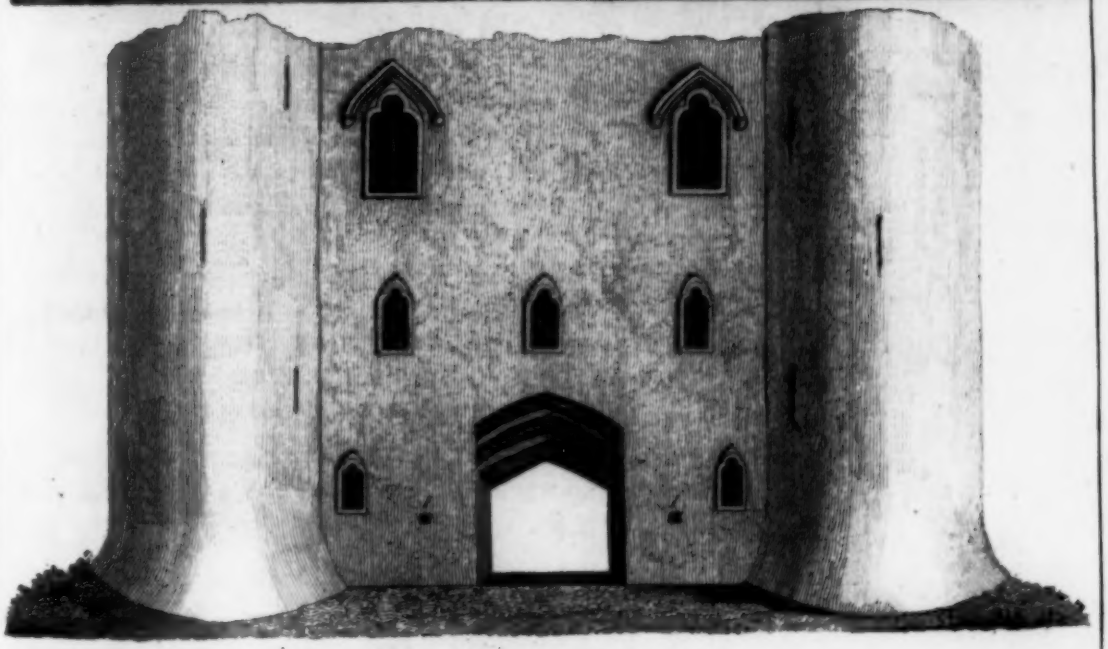
And firſt there ſeems to be ſomewhat of a new improvement, in the device of ſeveral of the loop holes; for they are formed as repreſented Fig. XXXVII *.

* See the Plate, p. 286.

The

F. XXXV





F. XXXVI

Tower of Enterance at Tunbridge Castle in Kent.

THE lower part of the loop, on the outſide, at (b), deſcending, by means of a ſloping cavity cut in the wall, *far* beneath the original opening inwards at (c); and by that means giving a far greater command of the area before the caſtle, to the croſs bow men; whilſt, at the ſame time, it would miſlead any one who ſhould attempt to ſhoot a weapon into it from without; and would direct that weapon in ſuch a manner, as to prevent its doing any harm; ſince it muſt ſtrike either againſt the plane (b c), or againſt the top (de).

IT is remarkable too, that the ornamental arches, forming the entrances to the receſſes that lead to theſe loops, *dip below the reſt* of the wall ſomewhat, in the manner repreſented, at (d); or even lower: ſo that although, at firſt ſight, in conſequence of the ſlope (e f), theſe loop holes appear more careleſſly formed than thoſe at Rocheſter, or Canterbury, yet they are in fact even more fully ſecured.

THE conſtruction of the chimneys alſo is curious: for notwithſtanding they are unavoidably repreſented in the plan, as if formed by means of receſſes in the walls in the uſual mode; yet, in reality, the wall at the bottom, behind each fire hearth, is level with the reſt of the walls in the ſeveral rooms; and only is ſo formed, as to riſe up from thence *ſloping backwards continually*, within the thickneſs of the reſt of the wall, till it reaches the loop of *exit*; in the manner repreſented F. $\frac{\text{XXXVII}}{2}$ and ſo as juſt to afford room for piles of wood to be ſet up an end leaning againſt it, under the flue: which mode of conſtruction muſt both have flung greater heat into the rooms, and have occaſioned a better draught up the chimneys.

FURTHER it may alſo be obſerved; that, to avoid weakening the walls too much, the ſmall rooms, and receſſes, formed in them, are no where alike on the two ſides of the tower on the ſame floor; but are placed counter to each other: ſo that if

 the

the wall was at all weakened by the recess on one floor, the defect was made good in the strengthening of the next *.

IT has been remarked to me also, by the present curious proprietor, that singular care seems to have been taken even in forming the mount; for that, from the looseness of the earth near the centre, (to which he made an excavation), it may fairly be concluded, that in order to give the whole work greater compactness, they began at the circumference, and continually poured in earth, as they advanced higher up, till the whole was finished. An odd process indeed, as it should seem at first sight; nevertheless such an one, as would certainly best preserve the exact form of the base, and also render the whole outward circumference of the mount more firm and compact; and thereby tend to prevent any settlement; except just in the centre; where it could be of no great consequence.

BUT notwithstanding all these various devices, and improvements; and the elegant construction of the whole of the great tower of entrance, beyond what appears in the towers of entrance at *Tickhill* and *Lincoln*; yet we may perceive, that the general mode of fortification, most peculiarly belonging to the Normans, and which was at their first coming introduced by them, has been carefully preserved, with all its characteristic marks., in every part of the general plan of this curious fortress.

WE find the high mount; the round keep on the mount; and the connexion of this, by a covered way, with the tower of entrance †.

* Some years ago the very quarry was discovered, at only a few miles distance, from whence the stone was taken with which this tower was built.

† I should be sorry to indulge myself in carrying conjectures, relating to high antiquity, too far; but, when I consider with what care and pains a magnificent state room has been formed, in every one of these kind of towers of entrance,

THERE

THERE are many caſtles of this kind of conſtruction in different parts of this kingdom: amongſt which we may now ſafely venture to pronounce *Trematon caſtle*, in Cornwall, to have been a Norman ſtructure, of the firſt age, notwithſtanding the doubts of the ingenious Dr. Borlaſe to the contrary *; and that it was built by Robert earl of Moreton and Cornwall, half brother to the Conqueror.

Reſtormel caſtle, in Cornwall, ſeems alſo to have been another ſtructure of the ſame age †. But I agree with Dr. Borlaſe, in concluding *Lanceſton caſtle* ‡ (which he has ſo accurately deſcribed) to be of much higher antiquity: and muſt place it, (both on account of the manner in which the ſtaircaſes are conſtructed, and on account of the ſmall dimenſions of the area of the inner tower,) amongſt the very firſt *Saxon caſtles*: and deem it to be even of more early date than Conniſborough itſelf.

NAY perhaps I ſhould not greatly err, if I were to venture ſtill further, and to conclude it to have been a work of the ancient Britons, erected in the firſt ages, in conſequence of that great degree of art, beyond the reſt of the Britons, which the Corniſh men might attain to, by means of their great intercourſe with ſuch foreigners as came from afar to trade for tin.

WHENCE either the rude Picts, or the Celtic Britons, or the primitive Saxons, or the Normans (all whoſe buildings have ſome diſtant reſemblance,) derived thoſe firſt ideas of military architecture, which ſeem ſo unlike the Roman, cannot be preciſely aſcertained: but it is very remarkable, what a great ſimilarity there is between this caſtle at *Lanceſton*, and the deſcription given by Herodotus of Ecbatana, the capital of Media,

I cannot but reflect upon what we ſo often read, with regard to the earlieſt ages of the world, of King's *ſitting in the gates of cities*; and of *judgement being adminiſtred in the gate.*

* Borlaſe's Antiquities of Cornwall, p. 355. † p. 356. ‡ p. 358.

built in the first ages of the world; and of that part particularly, which may be concluded to have been the keep of that ancient and magnificent fortress.

HERE at Lancefton we find (according to Dr. Borlase's accurate description *) three great and elevated circular walls, towering *over*, and *behind* each other: namely, that of the first ward; that of the second ward; and that of the innermost ward, or central tower. Besides which, there is, on one part, the outward wall of the bass court of the castle; which would appear, in many directions, at a distance, as a fourth wall beneath the rest.

IT is almost impossible for any one acquainted with ancient history to view these, and not to call to mind what Herodotus says of Ecbatana †. He tells us, *Dejoces* compelled the Medes to come under one polity, and to build a city surrounded with fortifications; and that those strong and magnificent walls, which were known under the name of *Ecbatana*, were then built. They were, he says, of a *circular* from, one within the other; and each gradually raised just so much above the other as the battlements are high; the situation of the ground, which rose by an easy ascent, being favourable to the design. *The king's palace, and treasury*, were built within *the innermost circle* of the seven which compose the city. The first, and most spacious of those walls, was equal in circumference to the city of Athens; and white from the foot of the battlements. The second, black: the third of a purple colour; the fourth blue: and the fifth of a deep orange: all being coloured with different compositions. And of the two innermost walls, one was painted on the battlements, of a silver colour; and the other gilded with gold. Having thus provided for his own security, he ordered the people to fix their habitations, without the walls of this city.

* See the Antiquities of Cornwall, p. 358. and the accurate *engraving* annexed to Dr. Borlase's description.

† Herodotus, Book Ist.

In this deſcription, ſurely, we have very nearly a deſcription of Lanceſton caſtle, and the adjacent town: almoſt the only difference being, that the ſcale, in one inſtance, is rather larger than in the other *; and that the battlements of the walls of the one were painted with different colours, and thoſe of the other left plain.

And the compariſon may, without any forced inferences, be allowed to afford much room for many new ſpeculations, on the progreſs of *Celtic* arts and cuſtoms from Aſia, and the parts of the world firſt inhabited, through the northern parts of Europe: but having no opportunity of coming at further materials at preſent, for tracing this matter, I muſt leave it, as a ſubject of enquiry for others.

I cannot, however, forbear obſerving, that the judicious Mr. Cordiner concludes moſt of the *duns*, or round towers, in Scotland, to have been built by the Danes †: and informs us, from good authority, that the Picts were connected with the Norwegians, who (under the command of *Harold*) aſſiſted them to endeavour the recovery of their loſt poſſeſſions in Scotland ‡. Whence I think we may infer, that

* When I read (in the 9th chapter of the 2d book of Kings) that on Jehu's being anointed King over Iſrael, at Ramoth-gilead, the captains of the hoſt, who were then ſitting in council, as ſoon as they heard thereof, took every man his garment, and put it under him, *on the top of the ſtairs*; and blew with trumpets, proclaiming, *Jehu is king*; and when I conſider the account given by Herodotus, of the ancient Ecbatana, which was at no great diſtance from Syria, and in a country much connected with it; and reflect alſo upon the appearance of the top of the ſtaircaſes, both at Lanceſton, and Conniſborough; when, I ſay, I conſider all theſe circumſtances, I am very apt to conclude, that at either of the two latter places is ſtill to be beheld, nearly the ſame kind of ſcenery, as to building, which was exhibited to the world, on the remarkable occaſion of inaugurating Jehu at Ramoth-gilead: but I dare not to determine preciſely on a matter of ſuch very high antiquity; and leave every one to form his own concluſions, from what has been here laid before him, as to the affinity of theſe kinds of buildings; and the derivation of their original plan from the eaſt.

† Cordiner's Antiquities of Scotland, p. 81.

‡ P. 127.

all

all their buildings had one and the ſame *Celtic* original, jointly with the Norman caſtles, and with theſe ſtructures of the earlieſt times in Cornwall. And ſure enough they differ not the one from the other hardly at all, except in ſuch a manner as they might well do in conſequence of the ſlow advancement of civilization amongſt the various people who built them *.

HAVING now inveſtigated *three*, ſucceſſive, different methods of conſtructing theſe important Fortreſſes: namely, the ancient Saxon; the improved magnificent buildings of Alfred, and his ſucceſſors; and the firſt Norman piles: we may eaſily perceive how the next alteration was introduced.

THERE were but few caſtles in England before the Normans came, which (as Dr. Borlaſe obſerves †) greatly facilitated their

* Of theſe Duns we have now many very curious deſcriptions. Particularly of Dun Aggleſag, (by Mr. Anderſon, in the Archaeologia, vol. V. p. 254. and by Mr. Cordiner in his Antiquities of Scotland, p. 118.) in which Dun appears juſt ſuch a ſort of ſtaircaſe as that at Conniſborough.

Of the Dun of Dornadilla, by Mr. Pope, in like manner in the Archaeologia, vol. V. p. 216. and alſo by Mr. Cordiner in his Antiquities of Scotland, p. 105.

Of the Dun in Glen-elg by Mr. Permant, in his curious voyage to the Hebrides, p. 338.

Of the Dun, at Achir na Kyle, by Mr. Cordiner (in his Antiquities of Scotland, p. 74) who adds (p. 75) that wherever good paſture is found near the leſs rugged foreſts, there one meets with the remains of a circular tower. All of which ſtructures have been originally built on the ſame plan, and appear to have been the reſidence of the chief families of a hardy race, in a very early age.

In the ſame curious work (p. 80) we have alſo an account of the remarkable caſtle at *Oldwick*, juſt one remove, in point of the improvement in Architecture, from theſe Duns: and perhaps one of the firſt attempts after the introduction of the uſe of Iron tools.

Mr. Cordiner moreover, deſcribing *Kildrumy caſtle* in Scotland, ſays, all the vaults, in one of the towers, are left open in the middle; through theſe paſſed a maſſy chain, ſuſpended at the top, reaching down to the ground, for the more commodiouſly raiſing water for the uſe of the upper apartments. Some old men, who remember when the chain was taken away, ſay, that there was a deep well underneath. (Cordiner's Antiquities of Scotland, p. 16.)

† Antiquities of Cornwall, p. 366. Dugdale's Warwickſhire, p. 426.

con-

conqueſt: and William was ſo ſenſible of this circumſtance, and ſaw the uſe of ſuch fortreſſes ſo ſtrongly, that he immediately promoted the building of new ones with all poſſible ardour. Several therefore were ſoon conſtructed, as we have ſeen, on the original Norman plan, by himſelf, and certain of his chieftans. But amongſt other perſons whom he employed, and conſulted, on the occaſion, was that great, ſagacious, and ingenious man, Gundulph, biſhop of Rocheſter. This extraordinary genius began to reaſon with more acuteneſs upon the ſubject than any architect had done before: and (being employed about the year 1078, to direct the building of the Tower of London *, and of ſome other fortreſſes), determined to unite together all the excellences of former ſtructures, (both thoſe of Alfred's caſtles, and thoſe of the great round towers of his own countrymen): and to add many new inventions; for the ſake of increaſing not only the ſecurity, but alſo the magnificence, of theſe Piles.

His mode of building was immediately ſo greatly admired, and ſo ſoon came into faſhion; that although the prejudice, in favor of the old plan, long continued amongſt the Normans; and many caſtles were ſtill daily built according to it; yet many alſo, in the very ſame age, and even in the very ſame years, were erected on Gundulph's.

He determined to get rid of the aukward labour of raiſing high artificial mounts, by way of defending the entrance and approach to the keep; deſpiſed the inconvenience of the central well, for the purpoſe of affording air, and light, in the round towers; and ſaw many defects even in the great caſtles of Alfred; eſpecially in their want of inward defence to the loop

* Stow's Annals, p. 117. See alſo Stow's Survey of London, p. 78. where it is added, with the uſual minute accuracy of that curious Antiquary, from unqueſtionable authority, that, during Gundulph's reſidence in London to ſuperintend the work, he lodged with one *Edmere* a burgeſs in the neighbourhood.

holes

holes in the lower apartments, and in the unguarded design of their great windows above.

IN short, to him appears clearly to be due, the honor of the invention of the noble high elevated portal, so compleatly defended by drawbridges, gates, and Portcullises (all placed in the most judicious manner) in lieu of the high mount; the invention of the mode of properly defending loop holes; the invention of wells, *concealed in the walls,* for the purpose of drawing up timbers; the improvement of the manner in which galleries of communication were constructed in the walls; and other judicious devices, with regard to the situation of staircases; and an improved mode of constructing even the very Dungeons.

THE noble proportions, and disposition of the state apartments, was also another excellence in Gundulph's keeps; as well as the stately mode of approach, and ascent to them*.

HIS castle at Rochester, which I have fully described in my former paper, is so compleat a specimen of all that he effected; that the mode of defence introduced in this next stage of the progress of military architecture, hardly needs to be any further enlarged upon.

I SHALL only, therefore, beg leave just to give a short answer to an objection or two, which I understand has been made to my former paper, by some persons not thoroughly acquainted with the subject. They have conceived, it seems, that the

* I cannot help mentioning, as an instance of the singular ideas of defence and security which this extraordinary man conceived, his treasury, built very near the church at Rochester; which is an high, strong, insulated, square tower; as lofty as the top of the church; but having neither door nor window, nor any other means of entrance, than by an arched bridge, from the top of church to the top of the tower, easily broken down on any emergency. This tower still remains, on the North side of the church.

wells

wells and galleries formed in the walls, and ſo minutely deſcribed by me in the account of the caſtle of Rocheſter, were made merely for the purpoſe of drying the ſtone-work; and that timbers might have been drawn up *on the outſide.* But every one, who examines them, muſt ſee that theſe wells and galleries are much too large for ſuch a purpoſe *merely* as that of drying the building, and very ill adapted to it; becauſe they open inwards, and not outwards. To which remark it may be added further, that if ſuch had been their deſign, they would have been found as frequently in other caſtles (where the walls are equally thick), as in thoſe of Gundulph's; whereas they are not. And as to the drawing up timbers on the outſide, which the objectors to my former paper have fancied might have been ſo eaſily effected; a little reflection will ſhew it was impoſſible to be done during a cloſe ſiege, when the baſs court, and all the environs of the tower, were in the hand of an enemy; as was actually the caſe in the very ſiege of Rocheſter, mentioned by Holinſhed, which I gave an account of in the concluſion of my former obſervations; and as was alſo the caſe in the ſiege of the caſtle of Malmſbury, of which Holinſhed ſays, "Duke Henry did win "in 1151, the *maſter tower*, or *chief dungeon:* for (as Simon of "Durham writeth) he had won by aſſault *the other parts and* "*lims of the caſtle before**."

Stores, and large timbers, to conſtruct and repair machines of war, could not be conveyed, at ſuch a time, when moſt wanted, from the vaults beneath, to the top of the caſtle, by any other means, than either by the old *central wells,* found in the more ancient caſtles, or by *theſe* more artificial wells of Gundulph's invention.

Some idea of the unweildy bulk of ſuch machines, may be conceived from what Camden ſays of the vaſt arrows ſhot from old warlike engines, preſerved and ſhewn in his time, in the caſtle at Dover †; and from what Biſhop Gibſon ſays of the balls of

* Holinſhed, vol. III. p. 60. † Gibſon's Camden, p. 205.

 ſtone,

ſtone, ſtill found near Kenelworth caſtle (16 inches in diameter) thrown in the barons wars*, which muſt have weighed at leaſt 200lb. weight; and ſeem to have reſembled thoſe ſeen by Maundrell†, near the old fortifications of Acra in Paleſtine, that were 14 inches in diameter.

Although, however, there needs no further deſcription of Gundulph's curious and noble towers, than what my former paper contains; yet a little attention deſerves to be given to thoſe which he (or perſons who followed his method) *merely altered.*

I shall therefore here add a further, and more exact account of Canterbury caſtle; which I have had an opportunity of examining moſt minutely, ſince the publication of my former obſervations; and which I find to be ſtill more curious, in many reſpects, than I was at that time aware of.

The great ancient Keep, at Canterbury, has the ſame kind of Norman Saxon ornaments with that at Rocheſter; and both from that circumſtance, and from the introduction of ſo many of Gundulph's modes of defence, appears clearly to have been finally compleated, either under his direction, or at leaſt in his manner, and in imitation of his works; yet it does alſo as clearly appear, from ſome other circumſtances, that the original ſolid maſs of the walls was conſtructed before that time, and was of a ſtill more early date; and indeed there is good reaſon to conclude, that this building was one of the great caſtles of Alfred; altered, new caſed, and improved, in Gundulph's manner, about the time of William the Conqueror.

It is well known, that there is, from the neglect of our hiſtorians and antiquaries, or from their want of information, the

* Gibſon's Camden, p. 513.

† Maundrell's journey from Aleppo to Jeruſalem, p. 54. This curious and faithful traveller ſays, that in the caſtle of Damaſcus he alſo actually ſaw an old Roman Baliſta, p. 126. And it is not a little remarkable, that we read of the invention of theſe kind of engines, ſo early as in the days of Uzziah king of Judah. See 2 Chronicles, c. xxvi. v. 15.

greateſt

greateſt uncertainty about the *æra* of the building of this caſtle: and all that has hitherto, in any ſhape, been agreed upon, with regard to it is, that a Caſtle was *here* in being, about the time of the Conqueſt, either then newly raiſed, or repaired.

CAMDEN declares *, that he has nothing memorable to ſay of it; only that it was built by the Normans. But Somner †, with more caution and judgement, concludes it to have been built *before* the Conqueſt; becauſe it appears, in Domeſday Book, that the King had this very caſtle in *exchange*, from the Archbiſhop and Abbot of St. Auguſtine's, for twenty-one burgenſes, 14 paid to the Abbot of St. Auguſtine's, and 7 to the Archbiſhop: and yet he juſtly infers, that it was not in being ſo long before, as when the Danes took the city, in 1011; becauſe of its not being mentioned either by Hoveden, or Spott, who minutely deſcribe the ſiege. It follows, therefore, that it muſt have been of the ſame age, originally, with the reſt of what I call Alfred's great caſtles.

THE ſame concluſion may alſo be drawn, from the original entrance being in the ſame part of the building, as the original entrance at Colcheſter, which was built by Edward the Elder; and the alteration, which we ſhall find was made by Gundulph, or at leaſt in his ſtyle, by the addition of a new and more magnificent portal, is no more than was afterwards done in the other great *Saxon* caſtles, which we are acquainted with: for I have ſhewn, in my former paper, that an addition of a *new* and *great portal*, was made at Colcheſter ‡, even in ſtill later ages, and moſt probably after the time of Edward I; and that a new portal, and magnificent ſtair-caſe, almoſt exactly in Gundulph's ſtyle, were added to Canute's great caſtle at Norwich §, by Thomas de Brotherton, in the time of Edward II.

* Gibſon's Camden, p. 199.
† Somner's Antiquities of Canterbury, p. 19.
‡ Archaeologia, Vol. IV. p. 406.
§ p. 597.

To avoid the perplexity and trouble, which would be occasioned by referring to my former paper, in order to explain the additional matters of curiosity discovered in this building, on my more accurate survey, I shall now describe the whole, *de novo.*

Fig. XXXVIII. is a plan of the ground-floor of the castle, to which there was no entrance from without, on the same level.

(a b) is the place of the original ancient Saxon steps, on the outside of the castle, towards the N. E. by E. (b i) being what actually remains firm and solid of this foundation.

At (f) are most perfect remains of the square well, and trap, for letting down prisoners, and their provisions, into the dungeon underneath, at (D).

And (g g) is a very small flue, for air thereto, passing through the most solid part of the foundation.

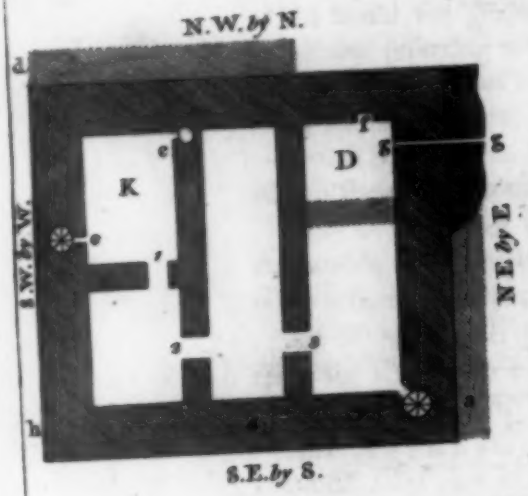
The partition wall, both of the dungeon, and vault above it, is now destroyed; and therefore we cannot precisely ascertain where the door was, or in what manner exactly it was constructed; but I cannot omit mentioning, that when I first surveyed the castle, an old man, attending me, said he remembered some steep steps somewhere in this very part, within the building; only the place where they were is now buried and filled up.

At (c), is the well for water; descending the whole way, from the upper part of the building to the bottom, through the substance of the wall.

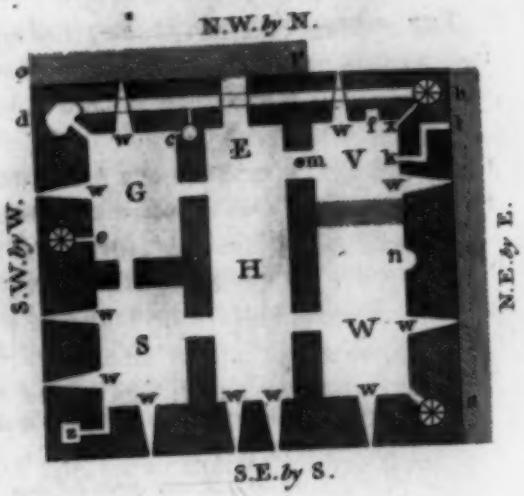
And at (e), a stair-case, which went no higher than from the ground to the first floor above: from whence, and from its nearness to the well, we may fairly conclude this apartment (K) to have served as a sort of kitchen, although it is now so blocked up with rubbish, that we cannot ascertain where the places for fire-hearths were.

The

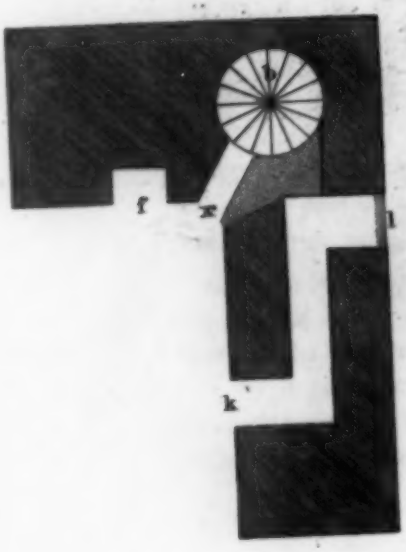
F. XXXVIII



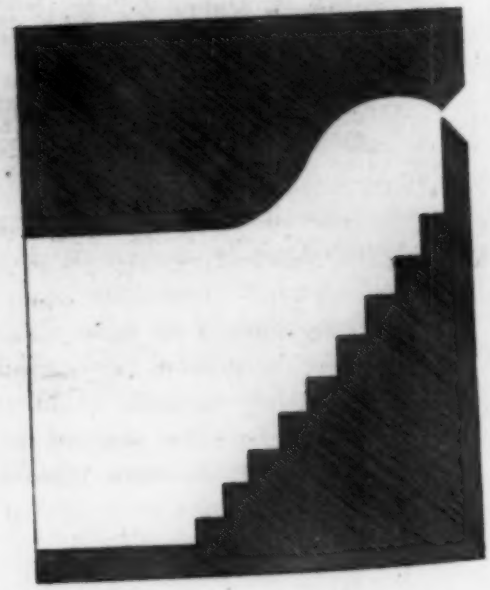
F. XXXIX



F. XL



F. XLVI



Plans and Sections of Canterbury Castle.

THE other three rooms were only great vaults, ſerving for ſtore-rooms; and communicated by arched paſſages, at (1), (2), and (3).

AT (a) is a ſtair-caſe, going quite from the bottom of the caſtle to the top; being the only one that does ſo; and placed, therefore, as far as poſſible from any original entrance from without.

AT (4) and (5), are the modern breaches, and forced entrances: but there manifeſtly never were any original entrances, in theſe places, in ancient times.

THE well, the deſign of the ſtair-caſe, and the deſcent into the dungeon, anſwering ſo compleatly to the deſign of thoſe in Gundulph's towers; might reaſonably induce one to look for *ſquare* wells *in the walls* of this caſtle, for the drawing up the beams of military machines; thoſe wells being (as far as appears to me) the invention of biſhop Gundulph; but ſuch being neither known at the time the walls of this building were firſt erected, and ſolidly built from the ground; nor capable, in their nature, of being hollowed out, or formed therein afterwards; we find none of them here. And I cannot but add, that their not being found here, is ſurely *a very ſtrong proof*, that ſuch wells had a deſigned, important uſe, wherever they are found; and were not mere flues, for drying of the walls, as injudicious perſons have haſtily conceived.

FIG. XXXIX. is a plan of the principal floor, where many ſtill more curious particulars are to be obſerved.

(a b) does here (as before) repreſent the ground plot of the original Saxon flight of ſteps; at the top of which, at (k l), was the firſt, and moſt ancient, grand entrance, in the ſame part of the building as at Colcheſter; but it was not by a ſtately open paſſage, as was uſual in ſubſequent portals, but by a narrow entry, formed in this inſtance in a *zigzag* direction, with great caution, ſo as to prevent the ſudden admiſſion of a

numerous

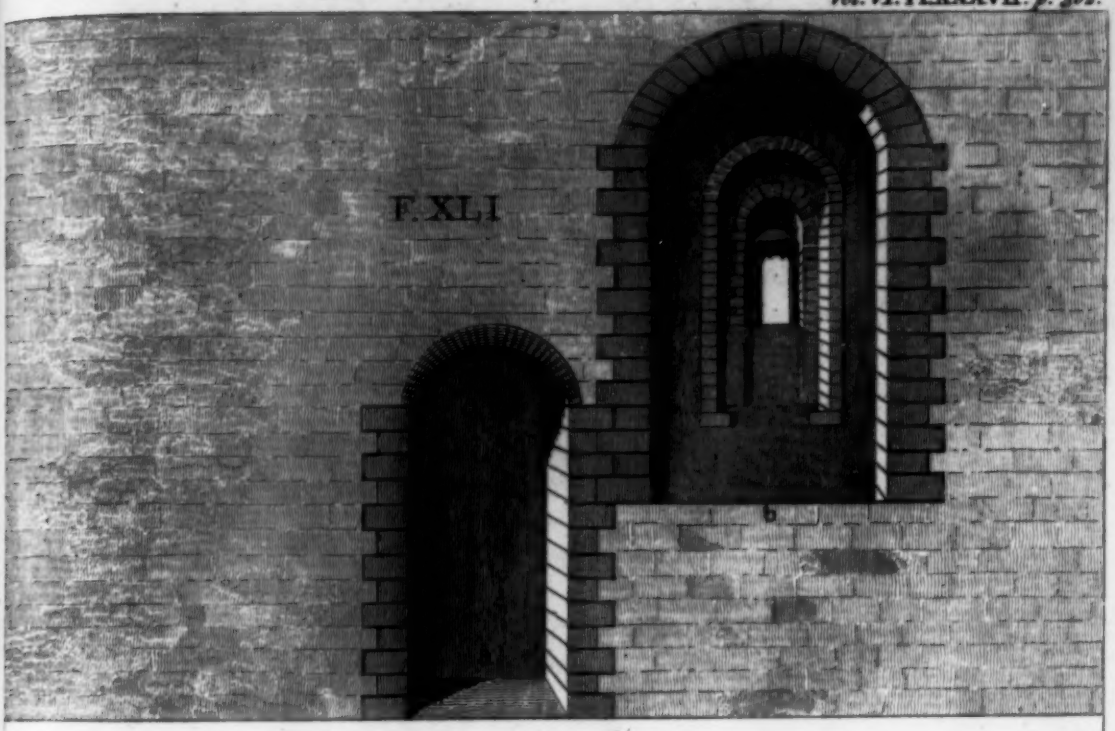
numerous armed force, notwithstanding the appearance of a large wide portal externally; and in such a manner, that one man might defend it against an whole army, much more easily than *Horatius Cocles* did the bridge Sublicius at Rome against the army of Porsenna: for it is evident, that, in such a passage as this, no soldier, endeavouring to force an entrance, could use either a pike, bill, or halberd; or indeed any other weapon except a short sword; whilst those who defended the entrance *within*, might use all, and apply many weapons at once to obstruct his progress.

ITS form is represented more at large, Fig. XL. The first streight passage, from the outward portal (l), being no more than 5 feet 6 inches in length; the next turn, being 14 feet long, and much narrower, having only 2 feet and 9 inches in width; and the third turn, to (k), being 6 feet in length, and no more than 3 feet wide; and the whole passage being only about 8 feet in height.

THIS entrance opens inward, through an arch, represented in front, at (a), Fig. XLI, which, in my former imperfect view of the inside of this castle (when I could only examine it through crevices of doors fixed in the modern breaches) I did not fully perceive the nature of; being not aware of the curious device of the winding passage within the wall.

AT (b), is a great window, near the passage of entrance; but placed so high, and having the opening so small, that it could be attended with no inconvenience or danger.

FIG. XLII. is a view of the inside of the winding passage of entrance (l k), and of the inside of the original great portal at (l), now bricked up; and also of an arched door-way, at (x), leading from the rooms within the castle to a stair-case in the corner; between which door and the winding passage, there must formerly have been a strong wall, to secure and inclose the latter; but *this* having been broken down, a communication has subsisted for many years of late, immediately between the



F. XLII

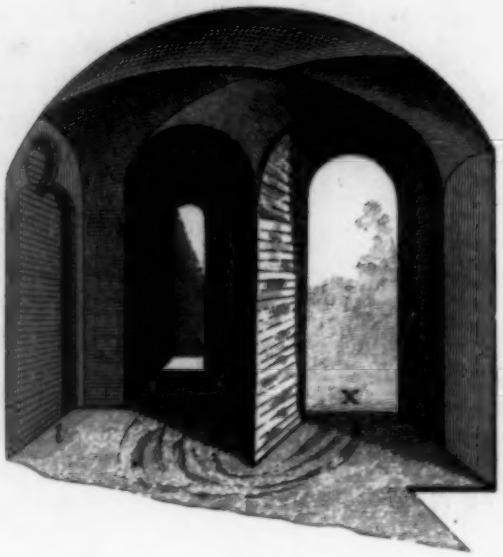
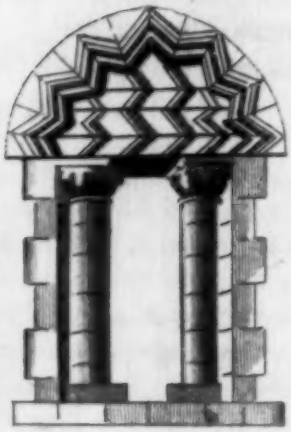


Figure 1

Window and Crooked Entrance in Canterbury Castle

F. XLV



Door Way and Outside of Window in Canterbury Castle

outward portal (before it was bricked up) and the stair-case in the corner, which may easily *now* mislead an inattentive observer.

By referring to the plans (Fig. XXXIX. and XL.) the whole of what is said will be best understood. The same figures (lk) shew the passage; as (x) does the door leading to the stair-case: and at (b) appears the stair-case itself in the corner; and the dotted part shews where the wall once was, that is now broken down.

The entrance, from the winding passage just described, was into a small room or vestibule (v). Directly on coming into which appears, on the right hand, at (f), the top of the trap, and descent, into the dungeon; the whole of which pipe of descent remains still well formed in the wall.

And it is very remarkable, that the flighe of stairs, near to it (at x and b), does not go down to the dungeon, nor descend any lower than this floor; but only leads up to the galleries in the wall, and to the top of the castle.

As a further proof of this winding passage of entrance, just described, being the original and principal one; there appear moreover, at (m), the remains of a double arch; which must, of old, have formed a noble and magnificent communication, between the vestibule and the great hall (H).

A view of its remains is shewn, Fig. XLIII.

From this Hall is an arched passage, leading to what seems to me to have been a guard-chamber (G). A room, which I the rather suppose to have been designed for this use, because there is here, at the corner (d), a small chamber (like that at Rochester) hollowed out of the wall, and divided off from the great room, as a little separate place of abode, intended probably as a badge of dignity, for the sole use of the captain of the guard. There being also most ready access to the well at (r), for the use and supply of the garrison, seems moreover to denote this room to have been their most usual place of rendezvous.

In

In this room alſo, at (e), was the head of the ſtairs, going down into the vaults, and lower apartments, deſcribed in the former plan.

From this guard-chamber was an arched paſſage, into what appears to have been one of the governor's ſtate-rooms (S); which has more light and airyneſs than any of the reſt upon this floor; there being three great windows in it. And from hence, through the great hall, was a way to what may very well be called a great winter room (w), there being in it, at (n), a large fire-hearth; and only two windows.

At (a) is the only ſtair-caſe that goes quite from the bottom to the top of this caſtle. But at (b), near the ſide of the original entrance, is (as I have already mentioned) another ſtair-caſe, that goes up merely to the galleries in the walls, and to the top of the caſtle, without deſcending any lower than this floor: and between (b) and (d) are the two galleries, one above the other, included within the thickneſs of the wall, and communicating with the well, and with the apartments both on this floor, and *in* that above: but ſo contrived, as to receive no obſtruction from the windows: neither did they break in upon the ſubſequent great portal, which was made at (E), and placed beneath them, and which ſhall preſently be deſcribed.

At (z) was a privy, having a paſſage leading to it from the corner of the room (S).

The great windows in all the rooms are marked (w), and their beautiful and magnificent conſtruction, on the inſide, is repreſented Fig. XLIV, as their form on the outſide is repreſented Fig. XLV.

Underneath theſe, in the apartments next below, were the loop-holes for croſs-bow-men; which evidently appear to have been altered, and improved, in Biſhop Gundulph's beſt manner, and long after the firſt conſtruction of this caſtle.

Their

F. XLIV

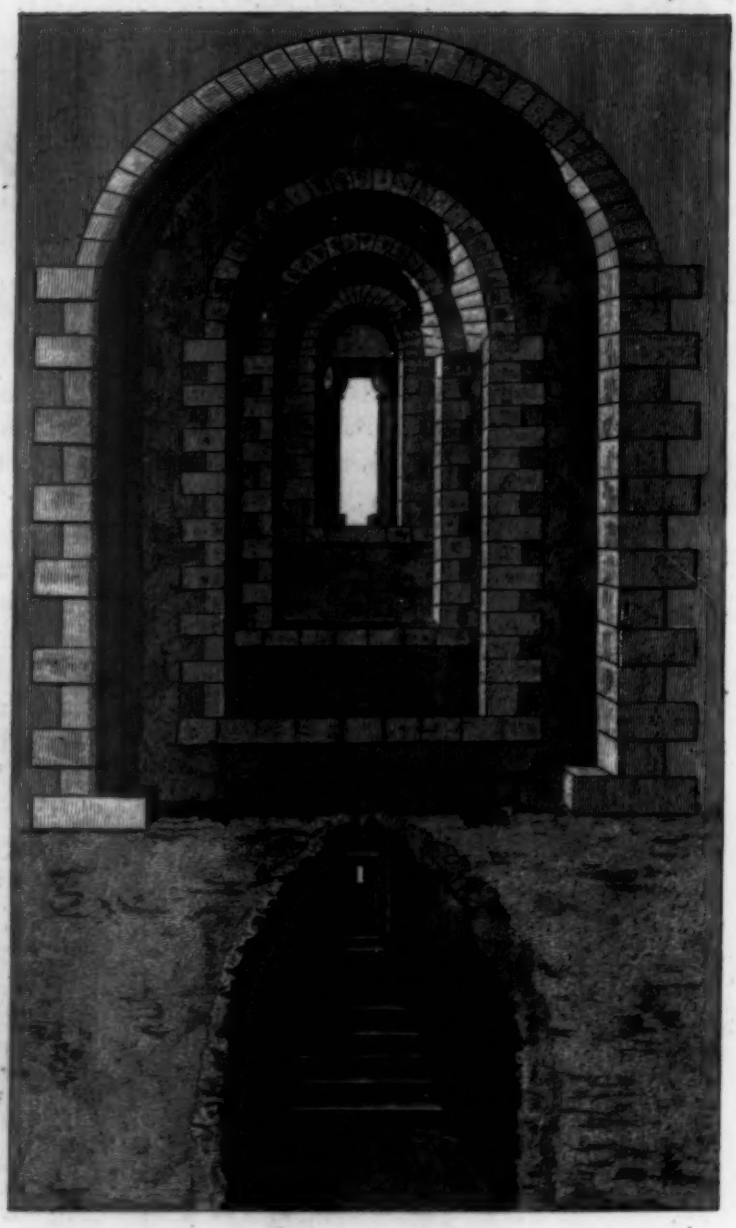


Figure 1.

Window and Loop in Canterbury Castle.

THEIR appearance within is repreſented in the lower part of Fig. XLIV, which ſhews the end of the room, beneath that where the window is.

AND Fig XLVI. is a ſection of the form of their conſtruction; they being, if poſſible, ſtill more guardedly and carefully contrived than thoſe at Rocheſter.

THERE are no leſs than twelve feet, from the bottom of the ſteps to the loop-hole; and twenty-ſix from the ground to the bottom of the loop; which indicates that there were vaults, without loops, under the apartments in which the latter are found.

BUT, as I have already intimated, the improved conſtruction of the loop was not the only addition made, in the beſt Norman manner, in this caſtle; for there appears to have been alſo added a ſtill more magnificent mode of entrance; in conſequence of which the former narrow entry was laid aſide, or at leaſt rendered merely ſubſervient to the new one, and turned into a *ſally port*.

THIS new and ſubſequent great portal was, in all probability, defended, on the outſide, throughout the whole aſcent to it, with ſeveral gates and portculliſes, like that at Rocheſter: the external veſtiges of them however are now deſtroyed; and therefore we can only draw this concluſion, from its ſimilarity in other reſpects.

A NEW and additional grand portal, there certainly was at (E), and it led immediately into the great hall; where now is ſeen a large arch of ſtone, having every appearance of being, moſt clearly, an inſertion made long after the firſt finiſhing of the original building; and having beneath it, at (o p), an appearance of the remains of foundations of a flight of ſteps.

AND this ſituation of a ſubſequent grand portal, on this ſide, moſt exactly agrees with the account given by Somner of the laſt principal entrance, according to the beſt information he could procure: whilſt it is an alteration of a ſimilar kind with (though of a much earlier date than) that at Colcheſter; where the old

 and

and more confined mode of entrance was alſo caſt aſide, and diſuſed, after better modes of defence, by means of porteculliſes, and double or triple gates, were introduced by the Normans.

SOMNER ſays *, the entrance of the caſtle *ſeemingly* was, by an aſcent of ſteps, *porcht over*, on the weſt ſide. By which however he muſt mean the ſide fronting NW by N; where there ſtill are, at (E), remains of the great portal juſt deſcribed; the arch of which is rudely filled up with flint work, juſt in the ſame manner as the ſtill more ancient and original portal at (I), is now filled up with brick work.

To prove ſtill further that the principal entrance was on this (commonly called the weſt) ſide, he moreover cites the recital in an ancient deed, recorded in the Leiger Book of Eſtbridge hoſpital. And his mentioning this entrance as being *porcht over*, plainly indicates that here were gates, with a porteullis, and the uſual mode of defence; and a paſſage leading through a *porch*, or little tower, at the top of the aſcent of a flight of ſteps, as at Rocheſter and elſewhere.

AND now, having mentioned the authority of this faithful antiquary, I muſt beg leave juſt to make a ſhort obſervation or two, concerning the *bearings* of this caſtle; both to explain Somner's deſcription, and alſo to reconcile the account, *here* given, with that in my former paper; and to ſatisfy ſome doubts that I know have ariſen concerning this matter. Therein I named (ab), the *eaſt* ſide; in conſequence of which deſignation, that which Somner calls the weſt would be the north. Nevertheleſs, that I did right (as far as any regard to the cardinal points *alone* was proper) muſt be evident to any one acquainted with the compaſs; for NE by E, is nearer to the eaſt, than to the north: and NW by N, (the ſide where the ſecond grand portal is found,) is nearer to the north, than to the weſt: and therefore (if the cardinal points alone are to be referred to;) (ab)

* Antiquities of Canterbury, p. 18.

ſhould

ſhould be called eaſt, and (b d) north. It is no wonder, however, that Somner, following the ancient deed, calls (b d) weſt, and of courſe (a b) to be north: for in theſe later days, of greater accuracy, a worthy friend of mine *, ſolicitous for the accuracy of any obſervations I might venture to lay before the Society, apprized me, with great diligence, of my ſuppoſed miſtake; and his information diſtreſſed me ſo much, (knowing the caution I had uſed in making my obſervations by the aſſiſtance of a good compaſs,) that I directly took a journey to Canterbury, at a moſt inconvenient time, merely to repeat thoſe obſervations; and then it was I diſcovered, what had occaſioned both his error, and that of Somner, and of the ancient deed; which was *an adjacent church*, with which the bearings of the caſtle were compared, and which was concluded to have ſtood, (as moſt are ſuppoſed to do), directly eaſt and weſt, whereas it by no means does ſo.

I MUST conclude, therefore, as far as the cardinal points are concerned, my original deſcription to be right, and Somner's to be wrong: but yet, for the ſake of conformity of deſcription, I *here* adopt Somner's *bearings*; whilſt yet, for the ſake of truth, I give the real ones.

A VERY few more curious circumſtances I have to mention, before I quit the deſcription of this extraordinary building.

AND, in the firſt place, I muſt obſerve, from Somner's account, that in this caſtle, as in many others, it appears there was regular *caſtle guard* to be kept, by *certain* perſons, in *certain* ſtations: for he ſays †, ſpeaking of the gate we have juſt been deſcribing, "This gate had its *uſual porter* or *keeper*. I "read ‡ that one *William Savage, keeper of the gate of the caſtle* "*in Canterbury, was queſtioned* (i. e. probably *racked*) for taking "the daughter of Hamon Trendherſt by force and arms, over "againſt the caſtle of Canterbury, and carrying her into the "ſaid caſtle, and there holding her eight days and upwards."

* The reverend Mr. Duncombe, of Canterbury.

† Antiquities of Canterbury, p. 18.

‡ In the Crown Rolls, anno 15 Edw. II.

In the next place it may clearly be inferred, from a circumſtance which Somner ſays he derived alſo from information in the crown rolls *, that although this caſtle was certainly one of thoſe appointed to be *priſons*, ſo early as the time of Edward the Second (and probably long before); yet that the appointment related not to the whole building, but merely to the general power of confining perſons here; and that the priſon itſelf was only of ſuch a nature as I have deſcribed in my former paper; and perfectly conſiſtent with the idea of the reſt of the Keep being conſidered, at the ſame time, as a *palace*, and being the reſidence of the conſtable, or lord, to whom it was granted. In ſhort that the priſon was confined merely to the ſmall dungeon, and its appendages; whilſt ſome of the priſoners (like thoſe we read of in more ancient times) were ſuffered to be more at large; reſtrained only by being chained, either to one another, or to ſoldiers †; or by being attended, wherever they went, by ſome ſoldier, as a guard.

The record, which Somner alludes to, ſays, "*Walter de Wedering*, and *Martin at Gate de Lamberburſt*, priſoners of our lord "the king, in the caſtle at Canterbury, ſat bound in a certain "place called Barbican ‡, nigh the ſame caſtle, to beg their bread. "It happened, that, on Shrove Tueſday, in the reign of king "Edward II. before ſun ſet, the ſame Walter broke the padlock, "or a link of the chain, with which he was bound; and drew "away with him the ſaid Martin, to the church of St. Maries of "the caſtle, where he remained, and abjured the kingdom of "England; and Martin, of his own accord, returned to priſon."

* Antiquities of Canterbury, p. 19.

† One cannot but recollect, on this occaſion, what is ſaid of the manner of St. Peter's confinement at Jeruſalem; in the Acts, c. xii. v. 6. and of St. Paul's at Rome, c. xxviii. v. 16.

‡ The *Barbican* was generally ſome ſmall round tower, for the ſtation of an advanced guard, placed juſt before the outward gate of the caſtle yard, or ballium.

Far

FAR different was the nature of this priſon in ſubſequent reigns, when the idea of the caſtle being a *palace* was forgotten; and when in the perſecuting days of queen Mary, five poor proteſtants were (as Fox records) famiſhed to death in this caſtle, the common neceſſaries of life being denied to them. Such a circumſtance, and the conſideration of the cruelties exerciſed in theſe kind of fortreſſes, in times of war, (concerning which we read, that at Rocheſter, on its being taken by king John, all the *demi-lances* or yeoman, and all the *arcubaliſters*, or croſs-bowmen, who had bravely defended the caſtle, were hanged*), may well make us join in the ſame ſort of exclamation, with regard to theſe buildings, as Lambarde does with regard to the religious houſes at Canterbury †: and make us ſay, with him, that as on the one ſide, in reſpect of the places themſelves, we cannot but pity and lament their general decay, and the loſs of ſuch ancient remains of curious art: ſo on the other ſide, conſidering the many ſeas of ſin and iniquity to which they were ſubſervient, we cannot but rejoice over their deſtruction.

LASTLY, I muſt juſt add a word or two concerning the ancient *Hebrew inſcriptions*, ſaid to be verſicles of the Pſalms, mentioned by Dr. Plott in a letter to biſhop Fell, and ſuppoſed to have been inſcribed by Jews, who were in former times priſoners in this caſtle.

THESE inſcriptions were partly on the wall of the ſtaircaſe, at (a), going from the bottom to the top of the caſtle; and partly on the walls of the guard chamber (G) where Mr. Fremoult, the preſent proprietor, ſaw them in 1732 ‡; ſoon after which time they were taken away: And they ſeem to give us a proof, that, at whatever time theſe poor Jews were priſoners, whether in the time of Richard I. or Edward I. that they had yet the permiſſion of rambling about the caſtle

* Holinſhed, vol. III. fol. 188.

† Lambarde's Perambulation, p. 296.

‡ As I have been informed by my worthy friend the reverend Mr. Duncombe, of Canterbury.

(like the prisoners before mentioned in the time of Edward II.) under certain restrictions; and amused themselves, in the company of the guard, and other domestics, in their own way.

Other castles, besides Rochester and Canterbury, constructed in the same style, are to be met with in various parts of this kingdom, and well deserve the attention of the curious. The great tower at Newcastle, built by Robert son of William the Conqueror *, when he was sent by his father against the Scots;—the castle at Richmond in Yorkshire, built by Alan earl of Britanny and Richmond, nephew to the Conqueror †. And the great Keep at Dover, built by Henry II. are all imitations of Gundulph's plan: the noblest, and perhaps the compleatest, (considering the mode of carrying on war at the time when it was adopted) of any that has ever been devised.

Having thus described the two different species of great castles, introduced about the time of the Conquest; the latter of which, being so excellent in its kind, was imitated, with various small alterations, in succeeding reigns; the progress of this enquiry leads us, in the next place, to consider an irregular, *mixed species* of building, which gradually took place soon after; became much confused about the time of king Stephen (when so many fortresses were hastily constructed, without the same skill and attention), and continued in use till the reign of Edward I. a species of building, which, although of a later construction, was not by any means so perfect in its kind, as that which we have just been examining.

Of this mixed sort of piles I shall, for the sake of explaining their nature as fully as possible, give a particular account of three: namely of one of the earliest; and of one of the middle period; and of one of the latter of these kinds; which all differ from each other; but had every one of them a distant resemblance of one or both of the modes of construction introduced by William the Conqueror.

* Camden, p. 856. Holinshed, vol. III. fol. 12. † Camden, p. 762.

Pontefract

PONTEFRACT castle *, that murderous den, where, first, its owner Thomas earl of Lancaster was put to death, by Edward II. where afterwards Richard the Second was most cruelly tormented with hunger, and cold, and then, in some manner or other, assassinated; where the innocent Anthony earl of Rivers, and Sir Richard Grey, were murdered; was built by Hildebert Lacy, a Norman, to whom William the Conqueror gave this town, and the grounds about it, *after* having dispossest *Alric* a Saxon. It was therefore probably built in the *latter* part of his reign, when he had been teized with many insurrections.

It's form bespeaks a Norman design; with imperfect, and rude alterations. The Keep (like the original Keep of the Normans) is situated on a mount; but of far less height than those.

LELAND says †, "the castle of Pontfract, of some called *Snorre* "*castle*, containeth eight towers; of which the Dungeon, cast "*into six* Roundells, three bigge, and three small, is very *fair*, "and hath a fair spring."

THIS Dungeon, or Keep, which he calls so fair, (from whence by the way we may conclude he did not mean a *gaol*, but a *palace*), is in part still remaining; having been too strong to be destroyed, by the waste of time, or malice of destroyers, or by the selfishness of those who coveted the materials; the three *small* roundells of ornament, however, are lost, and gone.

FIG. XLVII. is a plan of that corner of the area of the castle, where the Keep or Dungeon, just mentioned, is situated; and where was also the principal entrance.

(a a) are the first outward steps; ascending from without to the area of the castle.

(b b) a second very steep flight of steps, within the *Ballium*, ascending up the artificial mount to the entrance of the Keep.

* Camden, p. 716. † See his Itinerary, fol. 43.

(cc) is a narrow loop; well secured; and made through a wall no less than eighteen feet in thickness.

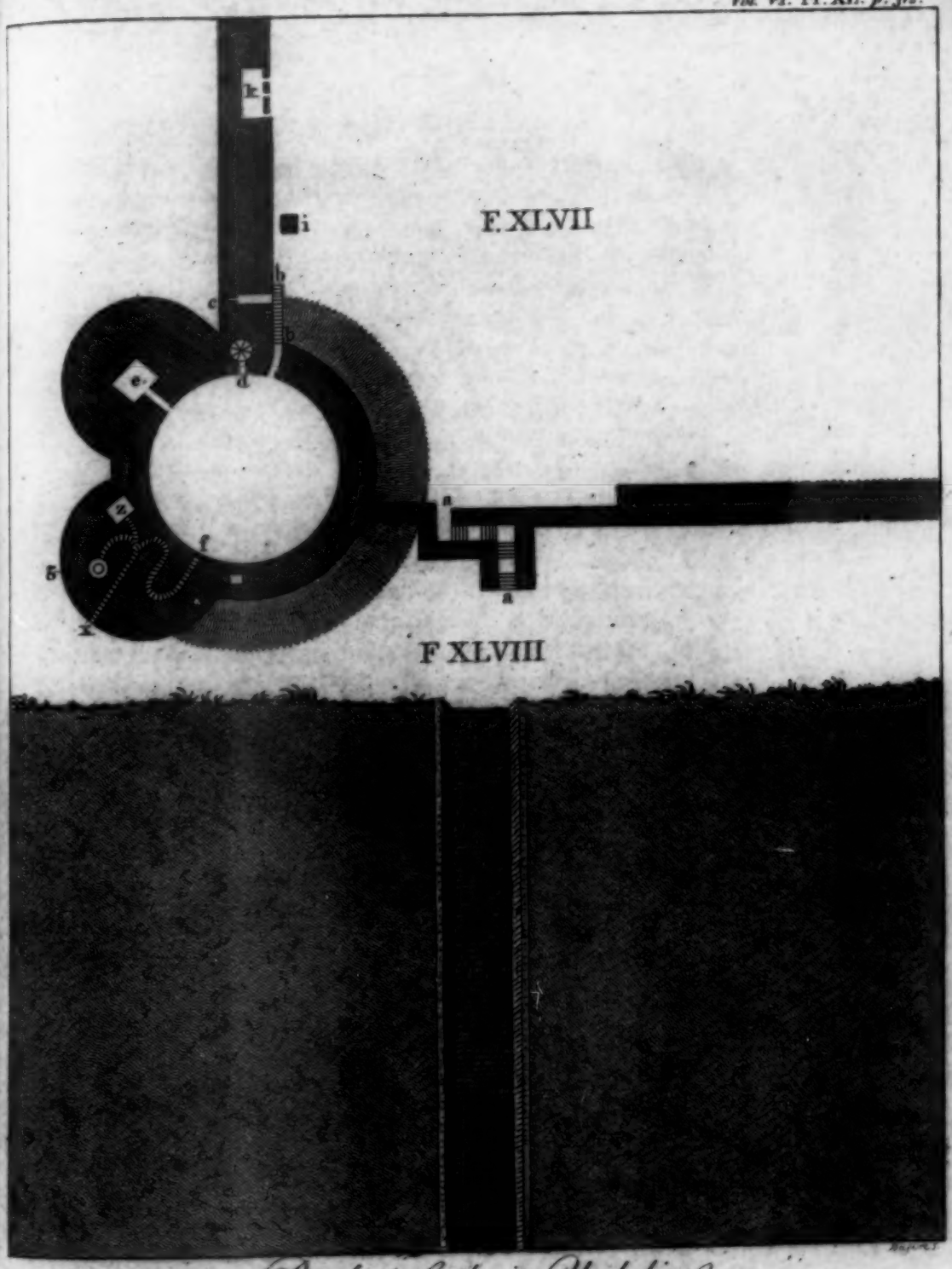
On entering the Keep, on the right hand, at (d), are remains of a great staircase, going up to the state apartments above, which are now all destroyed.

At (e), is a small square room; probably designed for the captain of the guard. It is in one of the three round towers mentioned by Leland: and all the substance of that tower, *beneath* this room, is solid stone work, quite to the bottom of the mount; which itself has no other facing here, than the walls of these two small round towers. A circumstance which shews the vast strength of this building, and the improvement made on the original Norman mount; and at the same time exhibits a curious device for deception, something like that of the round tower at Rochester.

The other small tower, being in like manner continued down to the ground, beneath the mount, contains a very singular, narrow, and most irregularly winding, *zigzag* staircase; which goes down from the door at (f) to a small sally-port at (x); and moreover leads to what appears to have been a well at (g) (which I suppose was the *fair spring* mentioned by Leland); and besides this it terminates, in one part, in a very frightful small dungeon, at (z).

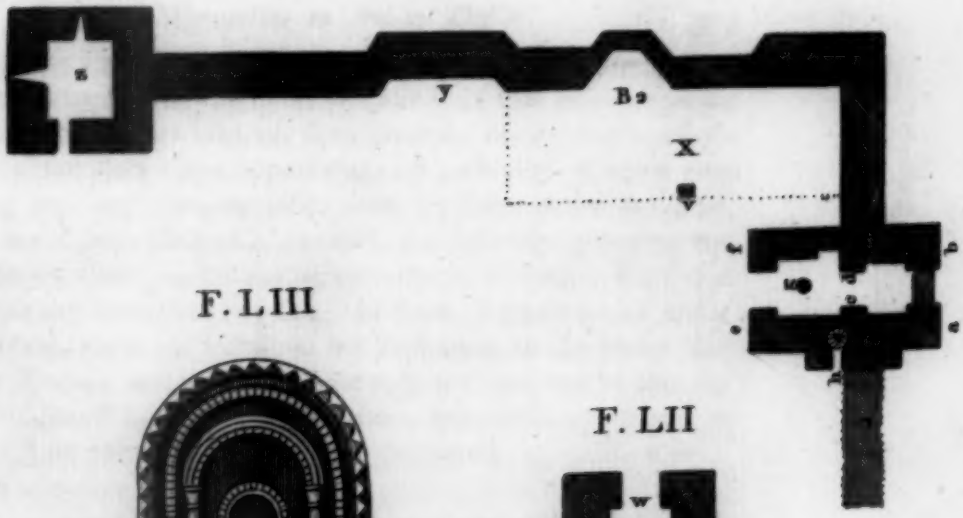
There do not appear to have been even loop-holes, or any admission for light or air, unless from the door, into the great lower apartment of the Keep; only there was a small window in the captain of the guard's room.

The diameter of the Keep however is about 63 or 64 feet. And between (f) and (h) is a very remarkable appearance; for after you have ascended a ladder, against the inside of the wall, for a few feet, you then look down into a dismal square cavity, at (h); about 14 or 15 feet deep, or rather more; but only



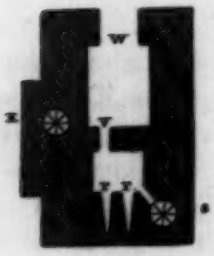
Pontefract Castle, in Yorkshire.

F. XLIX

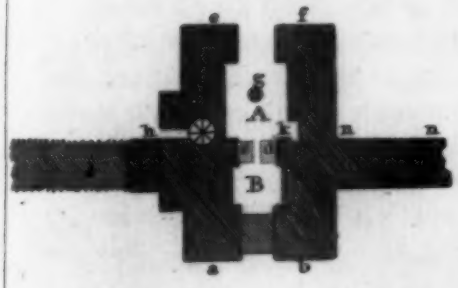


F. LIII

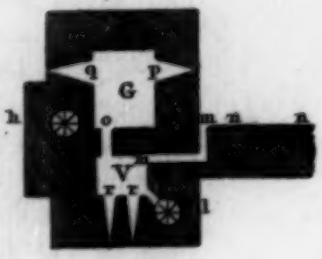
F. LII



F. L



F. LI



Nafire. I.

Nawark Castle in Nottinghamshire.

only about 5 or 6 feet ſquare; which cannot be conceived to have been applied to any other purpoſe than that of a dungeon; ſince there is neither loop, nor door beneath; nor any outlet whatſoever; nor does there appear the leaſt poſſibility of there ever having been any: nor could it, from its ſhape and dimenſions, have ſerved for a ſtair-caſe, or well, for drawing up timber and machines of war, or for any other purpoſe whatever, than that of a place of ſevere confinement. In ſhort, it reminds one of the deſcription, given by *Salluſt*, of the *Tullianum*, in the *ancient Capitol* at Rome: and as it even now very well anſwers to that deſcription, muſt have done ſo ſtill more, before the upper part of the building, with the arches, was deſtroyed.

The words of Salluſt are,

Eſt in carcere locus, quod Tullianum appellatur, ubi paululum aſcenderis ad lævam, *circiter duodecim pedes humi depreſſus. Eum muniunt undique parietes, atque inſuper camera lapideis fornicibus vincta, ſed incultu, tenebris, odore fœda, atque terribilis ejus facies**.

But this is not the only ſtrange place, within the incloſure of this formidable caſtle: for, fronting the foot of the ſtairs, at a little diſtance, at (i), is the ſquare mouth of another well, of a moſt extraordinary kind; having been either a very horrid dungeon, or the inward mouth of ſome very ſingular ſubterraneous ſally-port. It is very deep; but quite dry; the ſides are neatly lined with ſtone; and on that which is neareſt to the foot of the ſtairs, on looking down, appears at a great depth, a very high arch, leading to ſome vault, or paſſage, as repreſented Fig. XLVIII. where it leads to, (or for what purpoſe it actually ſerved) may be well worth examining; but I had no opportunity of doing ſo.

At (k), is a very narrow, wretched Chamber; formed in the thickneſs of the wall; which has two very ſmall narrow windows next the court. Here tradition ſays Richard II. was

* Salluſtii Bellum Catilinarium, ed. Delph. p. 50.

 confined,

confined, and murdered. And, indeed, the damp, and chillineſs of the place, agrees well enough with what is ſaid of his ſufferings, by ſome authors; who affirm that he was ſtarved to death, pinched with want and cold. The ſituation alſo of the little windows, might make it very eaſy to annoy him with the ſtench of carrion, which circumſtance I remember to have ſomewhere read was added to his other torments: but the ſmallneſs of the room hardly agrees with what is related of the manner of his death, by a blow, with a battle-ax, from Sir Piers Exton; although his being ſo murdered was a ſtory generally received and believed *.

IT has been accurately enough obſerved †, that the account of his being ſtarved to death, is more conſiſtent with what has been related, upon moſt unqueſtionable authority, of his body having been expoſed in public; for we do not find that any external marks of violence were perceived or viſible upon that occaſion.

IT was ſhewn openly (as Holinſhed aſſures us ‡), with the face uncovered, that all might know the perſon, in all the towns and places between Pomfret and London, where thoſe that had the conveyance of it did ſtay all night.

MOREOVER it was expoſed in Cheapſide, as Froiſſart aſſures us; whoſe account is ſo curious that I cannot but inſert it. "How he died, and by what means, (ſays Froiſſart §) I could "not tell, when I wrote this chronicle. But this king Ri-"chard dead, was laid in a litter, and ſet in a *chaire* covered "with *baudkin*, and four horſes all black in the *chaire*; and "two men in black leading the *chaire* ‖; and four knights all "in black following. Then the chair departed from the tower "of

* Stow, fol. 325. † Hume's Hiſtory, vol. II. p. 274.

‡ Holinſhed, vol. III. fol. 517. § Froiſſart, Pt. 2. Ch. 249.

‖ There is a curious repreſentation of this chariot, in the fine illuminated *Froiſſart*, in the Britiſh Muſeum; from whence it appears, that the carriage was drawn by the *two* horſes placed one before another, juſt as the *five* horſes were after-

" of London, and was brought along, through London, fair " and ſoftly, till they came into Cheapſide, whereas the chief aſ- " ſembly of London was; and there the *chaire* reſted the ſpace " of two hours. Thither came in and out more than twenty " thouſand perſons, men and women, to ſee him, whereas he lay, " his head on a black cuſhion, and *his viſage open*; ſome had on him " pity, and ſome none, but ſaid he had long ago deſerved death."

SURELY, had there been any ſuch wound, as the ſuppoſed blow from Sir Piers Exton muſt have occaſioned, it could not but have been diſcerned and taken notice of on ſuch an expoſure. We may therefore, I think, fairly conclude the whole relation concerning that blow to be fabulous; notwithſtanding its being adopted by ſo many hiſtorians, and by Shakeſpear. And I muſt add, that when, by accident, I had an opportunity ſome years ago, (with my late friend Sir Joſeph Ayloffe, and ſome other gentlemen), of examining *the ſkull* itſelf, in the ſepulchre at Weſtminſter Abby, there did not appear any ſuch marks of a blow, or wound, upon it, as could at all warrant the commonly received hiſtory of this wretched king's unhappy end. A ſmall cleft, that was viſible on one ſide, appeared, on cloſe inſpection, to be merely the

afterwards placed in the funeral car of Henry the Seventh, as deſcribed by Hall (*v.* III. p. 800) and repreſented in a drawing in the Herald's office. In the ſame moſt valuable and beautiful manuſcript of Froiſſart, is alſo a wonderful fine drawing of the ſeizing and apprehending of Thomas de Wodeſloke firſt duke of Glouceſter, at Stratford; when Richard the Second, going ſuddenly to the duke's ſeat at Pleſhy in Eſſex, had cauſed the latter to accompany him on his way to London. The pourtrait of the king bears a remarkable reſemblance to that which was formerly put up in the choir of Weſtminſter Abbey; only with this additional circumſtance, that a certain degree of unfeeling *hauteur*, manifeſted by him on that occaſion, is characterized in a moſt wonderful manner.

In the ſame valuable manuſcript alſo, is a curious repreſentation of the form of cannon, conſtructed with rings and iron bars; and of the manner in which they were originally mounted at ſieges, on their firſt introduction into this country, in the time of Edward the third; a ſketch of one of which I have added, in a ſmall *vignette*, at the end of theſe obſervations.

opening of a *future*, from length of time, and decay: and was, besides, in such a part of the head, that it must have been visible, when the visage was exposed, had it been the consequence of a wound given by a battle-ax; it being at the top of what the Anatomists call the *os temporis**.

AT (l), are remains of a wall, twelve feet ten inches thick; and the rest of the castle was of proportionable strength. It's ancient appearance, with it's many towers, is curiously represented (though not in good perspective, nor exact proportion), in a plate published by the Society of Antiquaries: but as most, if not every one of these towers, were undoubtedly subsequent additions to that of the Keep, and are moreover now all destroyed, I omit any further mention of them.

NEWARK castle; the second I shall mention; Camden says † (using the words of a more ancient historian), "was built by "Alexander, that munificent bishop of Lincoln, who being of "a very liberal and gentile temper, built this, and another castle, "at vast expence: and because buildings of this nature seemed "less agreeable to the character of a bishop, to extinguish the "envy of them, and to expiate, as it were for that offence, "he built an equal number of monasteries: and filled them "with religious societies." Yet king Stephen soon made both him, and his uncle the bishop of Salisbury, suffer greatly for this their liberality, and shew of splendour. The account given by Holinshed of this matter, is so odd, and contains such characteristick marks of the times, that I trust I shall obtain pardon for transcribing it.

* A copper gilded crown, that had been placed on the head, remained still in the sepulchre; so also did another skull, that of his Queen; but there were no marks on the latter, to authorize any such story as that of Sir Piers Exton, even supposing a mistake to have been made with regard to these two poor remains, as to the ascertaining which was which.

† Gibson's Camden, p. 484.

"STEPHEN

"STEPHEN (says Holinshed*) began to repent himself, al-
"though too late, for that he had granted licence to so many
"of his subjects to build castels within their own grounds, and
"amongst others he vehemently suspected Roger bishop of Sa-
"lisbury (who had done very much for him), and Alexander
"bishop of Lincoln, *nephew* to the said bishop of Salisbury, or
"(as some thought) more near to him in kindred. For the
"said Roger had builded divers castles: and the said Alexander
"likewise, following his uncle's example, bestowed his money
"that way very freely, having builded one castell at *Newarke*,
"and another at Sleeford. The king therefore, having committed
"both these bishops to prison, he threatened to keep them with-
"out either meat or drink, if they would not cause these castles to
"be delivered into his hands; whereby he obtained them: and
"moreover found, in the bishop of Salisburies coffers, forty
"thousand marks, which he took to his own use, by way of
"confiscation. This ingratitude of the king so wounded the
"bishop's heart, that, taking thought for the loss of his houses
"and money, he pined away, and died within a little while
"after.

"THIS Roger bishop of Salisbury, was in the days of Wil-
"liam Rufus a poor priest, serving once in a village, near the
"city of *Caen* in Normandy. Now it chanced, that the lord
"Henry, the king's brother, came thither on a time, and
"called for a priest to say mass before him; whereupon this
"Roger coming to the altar, was by and by ready, and quick
"at it; and therewithall had so speedily made an end thereof,
"that the men of war then attendant on the said lord Henry
"affirmed, that this priest, above all other, was a chaplain
"meet to say mass before *men of warr*; because he had made
"an end when many thought he had but newly begun. Here-
"upon the king's brother commanded the priest to follow him;

* Holinshed, vol. III. fol. 50.

"insomuch,

" insomuch, that, when opportunity served, for his diligent " service, and ready dispatch of matters, when Henry had at- " tained the crown, he was by him advanced to great promo- " tions: as first to be chancellour of England; after bishop " of Salisbury; growing still into such estimation, that he " might do more with the king than any other of the council."

IN this castle of Newark king John ended his days: and it is no less noted for another remarkable event; the siege it sustained during the time of the civil wars.

LET us now see the nature of its original construction; and of *some* of the additions made to it: for here, as in many other fortresses, the first erected and most important parts of the pile, were too strong to be easily demolished, by any common efforts; whilst most of those of later date are utterly gone.

FIG. XLIX. represents a plan of what remains; being part only of the inclosure of a large area; which was an oblong square; situated on an high bank, by the side of the river Trent, which runs at the foot of these ruins. The entrance was on the side that is now demolished. And at (a b c d e f), on the S E side, stands the original Keep, undoubtedly the ancient place of residence of the lords of this castle.

IT's construction is very odd, and curious; and I shall give three distinct plans, of the three several stories; in order to render the whole more intelligible.

FIG. L. is the ground floor, where we find *two* rooms.

THE inward one (A); is 15½ feet by 19; but without either loop or window.

AND the outward one (B), is also without loop, or air hole, and 12 feet 9 inches only, by 10 feet; which proves that the walls here must be of much greater thickness than those of the inner room, the surface of the walls of the tower, on the outside, being all level, and quite even; as represented in the plan.

THE partition wall (c d) is six feet thick: the arch in the middle is about 9 or 10 feet in diameter; having been closed up

up all but a ſmall narrow door: and the outward wall (a b) is much thicker; where was another great arch, compleatly of the ſame dimenſions, cloſed as appears from the very firſt, and rendered ſolid the whole thickneſs of the wall; which therefore could certainly anſwer no other end than that of mere deception.

And what is ſtill more extraordinary; there was in the ſtrong wall, by the ſide of this arch, at (i), juſt ſuch another arch; in like manner cloſed up; which could be deſigned, only, upon the ſame plan, *for deception*: one of the perſons who was employed to take it down, within a few years, aſſured me, that ſo far from there ever having been any entrance in that place, there was ſuch a moſt prodigious thickneſs of ſolid wall againſt it, and ſo ſtrongly compacted, that they had the utmoſt difficulty to remove the maſs; the expence and labour of doing which was very great.

We have here, therefore, as well as at Dover and at Rocheſter, the ſtrongeſt proof of the reality of mock arches having been conſtructed for the purpoſe of *deception:* ſince ſuch as theſe could not poſſibly anſwer any end by way of ſupport, or contribute in the leaſt degree either to the ſtrength or ornament of the building; but muſt ever have appeared, externally, rather as weak parts. Nor was there any danger leaſt a frequent change of garriſon ſhould (as ſome may be ready to ſuppoſe) betray the ſecret; for it is well known, to thoſe verſed in the ancient part of the hiſtory of our country, that there was no great change of garriſon in old times; the feudal tenants, or perſons employed and hired by them, or with their money, being generally the ſtated defendants of the caſtle, let the government of it have been committed to whom it might.

At (g), in the middle of the outward room, was a well for water; ſtill open.

And at (k), is moſt a remarkable ſmall receſs, with an arch on the right hand, next (d), leading down to what ſeems to have been a diſmal cloſe dungeon.

AT (e f), was the arched entrance to these two vaults; but it is remarkable that they had neither windows, nor loops, nor any kind of communication with the rooms above; so that, if the mock arch, at (a b), had been at any time broken through, there would still have been no further admission.

AT (h), indeed, opening to the inner court, was a staircase; but it had no communication with these rooms, nor indeed with any rooms in the tower; it went merely streight up to the battlements, and top of the building.

FIG. LI. is the plan of the next apartment above; which was the first principal one.

AND here the entrance was by a covered way, from the adjoining wall, (n n), similar to that of an old Norman castle: the passage being a winding one (m m m) by which admission is gained into a small vestibule (v); wherein still are only two narrow lights like loop-holes (r r); but from hence, by an arched door way, at (o), is a passage to the guard room, (G), which has two fine arched windows; at (p), and (q).

AT (l) is the grand staircase; beginning at this floor, and leading to the state apartments above. And at (h) is the stair-case before mentioned, from the open court of the castle to the top of the tower; having no communication with any apartments on this floor, or any where within the castle; and being most manifestly designed (like one of those that formerly was visible at Tunbridge) merely for the use of the soldiers who defended the works.

FIG. LII. is a plan of the state apartments.

AT (s) is the top of the grand staircase.

AT (tt) are two windows in the second vestibule above.

AT (v), is the door of the state apartment; in which was a fine window, at (w). It has been much injured, and ruined; but how magnificent it was, may be conceived, by the remains of

of thoſe in the lower apartment; one whereof, viz. that at (p), is repreſented Fig. LIII.

At (x) again is the outer ſtaircaſe; ſtill having no communication with the inſide; but going quite to the top of the tower.

Let us now return to the general plan Fig. XLIX, and ſee what were the other parts of the building; and the additions.

At (z) is another ſmaller tower, with very thick walls, and loops: and probably there were originally three others, at the other corners, correſponding with it.

At (y) is a ſort of half tower; oppoſite to the original great gate of entrance; and hanging over the river.

At (X) are the remains of a great hall, marked by the dotted lines; built manifeſtly in later times, as is evident from the manner in which the roof appears to have been inſerted into the walls of the caſtle; both on the ſide, and at the end: in which hall was a great bow-window hanging over the river, and of ſtill later conſtruction; as it could not have been placed there till all the ancient modes of defence were conſidered as obſolete.

Under this hall, is a moſt curious arched vault; ſupported by a row of pillars in the middle, and having loops, and embraſures toward the river, in which were planted cannon, in the time of Charles the firſt; and at the end of this vault, are remains of the entrance of a ſubterraneous paſſage, that is ſaid to have gone a great way under ground: there are alſo remains of a ſtair-caſe from this vault, up to the hall, at (y).

Exclusive, however, of this hall, and vault; what remains of the building, appears to continue moſt evidently, preciſely as it was in the time of king Stephen; and exhibits a curious ſpecimen of the odd mixture of old Norman architecture, and of ſome of Gundulph's improvements.

The laſt caſtle of the irregular kind which I ſhall deſcribe, is that of Knareſborough, in Yorkſhire.

CAMDEN ſays it was built by Serlo de Burgh, uncle to Euſtace Veſcy. And in this caſtle, it is well known, the four knights, who ſlew Thomas Becket, defended themſelves, and remained cloſely ſhut up, an whole year.

THE conſtruction of the arches, however, and the ſtyle of the whole building, ſhews that the preſent Keep could not be built earlier than about the time of Henry the Third.

THE encloſure of this caſtle was of conſiderable extent. It's entrance was by means of a draw-bridge, from a low deep valley: over which, on the very brow of an high precipice, the two round towers, formerly defending the gate, ſtill hang in a moſt ſurpriſing bold manner.

THE Keep is very curious, and extraordinary, in its whole ſtructure and deſign.

THE elevation of its outſide towards the South *, is repreſented Fig. LIV.

THE wall, even in the weakeſt part, is about *ten* feet thick. The width between the towers, at the corners is 48 feet 3 inches. And the little corner tower, at (z), is entirely ſolid: yet might eaſily deceive an enemy, by an appearance of weakneſs. Eſpecially as the other tower, at (y), has obvious marks, that would at firſt ſight lead any one to think both of them incautiouſly conſtructed; having not only a loop, but alſo a window: even this appearance, however, is again deceitful; for this very turret (y), as well as the former, is all one compact maſs of ſtone, except only a narrow excavation leading to the above mentioned window, and a very ſmall part of an adjacent vault, leading to the loop; all which will be beſt underſtood by the ſubjoined plan.

AT (a) is the grand portal; highly enriched, and of a very ſingular form; having, in the upper part of the arch, the ap-

* It is rather remarkable, and ought not to be paſſed by quite unnoticed, how cautiouſly and regularly the entrances of many of the ancient keeps were turned towards the ſouth.

pearance

pearance of the tracery of a window: a circumſtance that may eaſily miſlead an unwary obſerver. Yet, that it really was the great gate of entrance, and not a window, appears from its dimenſions being ſo much greater than thoſe of any of the windows; from its bottom being exactly level with the floor of the apartments adjoining; and from the remains of the foundation of ſteps, plainly leading up to it; which may clearly be ſeen, a (f), juſt beneath.

NEVERTHELESS I muſt confeſs, that even all theſe circumſtances put together did not ſo entirely ſatisfy me, but that ſome doubts remained in my mind, whether this great arch might not have been converted into a window, in latter ages; till I at length met with the door-way of the very ancient church at Ancaſter, in Lincolnſhire; conſtructed nearly in the ſame manner, and probably about the ſame age: and then, recollecting that there was alſo ſomething of the ſame appearance, in what is called the *golden gate at Jeruſalem*, conſtructed moſt probably by the Croizes, I became convinced that this was certainly a mode, ſometimes uſed, for the ornamenting of doors, and arched entrances as well as of windows. And endeavouring to inveſtigate this matter ſtill further, I ſoon found that the richly ornamented door-way of the chapter-houſe at Southwell; and alſo that of the chapter-houſe at York; and that of the ancient chapter houſe, in the cloyſters at Weſtminſter; and ſtill more particularly a curious old door-way, on the right hand, as you enter thoſe cloyſters from the dean's yard; all conſtructed about the ſame age; might with great propriety be mentioned as inſtances to illuſtrate this fact; although it be true, that in all theſe latter, except the laſt, there are not only the ornaments over head, but alſo a pillar, in the mid-way.

FIG. LV. is an exact repreſentation of the ſtone arched door-way, of the church at Ancaſter; which, though of ruder work-

manſhip, is ſtill more odd, and more unlike a door-way, than even the portal at Knareſborough. It ſtands on the ground, and has a deſcent of a ſtep or two; and the points over head are of great thickneſs and ſtrength, being evidently formed of ſuch vaſt ſubſtance to prevent their being eaſily broken.

FIG. LVI. is a repreſentation of the golden gate at Jeruſalem, taken from Sandys's view of it; to the exactneſs and fidelity of whoſe drawings, both Maundrell, and ſubſequent travellers have borne the ſtrongeſt teſtimony.

FIG. $\frac{LVI}{2}$ is a repreſentation of the door-way of the ancient chapter-houſe, in the cloyſters of the church at Weſtminſter.

AND Fig. $\frac{LVI.}{3}$ is a drawing of the door-way, on the right-hand, as you enter the cloyſters, which formerly led into the ancient refectory.

We may, therefore, now, from all theſe inſtances, certainly conclude the great arch, juſt deſcribed, at Knareſborough, to have been (what every other circumſtance clearly indicates it to have been) the great portal, at the head of the ancient ſtairs.

AT (b), F. LIV. is another ſmaller arched entrance: which ſeems to have been juſt under the draw-bridge, like that at Rocheſter, and leads into the ground rooms.

AND at (d), is ſtill another arch, originally concealed, in all probability, beneath the ſteps and platform of entrance, and leading to the vaults below.

AT (c), is a little door-way, leading to a ſmall vaulted room, where the records of the *foreſt* have been kept for time immemorial; and which has no ſort of communication whatever, with the reſt of the inſide of the caſtle. A ſingularity peculiar to this building.

AND at (e), is one of the great windows of the ſtate apartments.

FIG. LVII. is the plan of the ground floor.

AND

And here, at (a), is the ſame entrance which is marked (b *) in the elevation, leading to the vaulted rooms; the firſt and longeſt of which is ſupported by two great pillars (x x); the one an hexagon, the other ſquare. This was maniſtly deſigned to hold ſtores; and accordingly in a receſs, at (f), is a ſquare well, within the thickneſs of the wall, for the drawing up beams, and other parts of military machines.

At (b), is the ſtair-caſe, communicating with the upper apartments.

At (c), is a ſecond ſmaller arched vault, having no light or air, except what came through the doors, and through a ſmall inner window, at (d), lighted merely from the corner room at (e).

For at (e), is a ſmall cell; having a loop open to the outſide of the caſtle, at the corner, over the precipice above the river; and ſo well fenced, by a tranſverſe wall, that no weapon, or fire-brand thrown in there, could poſſibly ever come within the ſtore-room.

At (g), is the remarkable little vault, for the keeping the records of the *foreſt*; which has no communication with the inſide of the building.

And at (h), is another little vault, or dungeon, no leſs ſingular, to which belongs the loop that appears in the tower, at (y). This vault, like the record-room, neither has, nor ever had, any communication with the inſide of the keep. It now ſerves for a priſon.

(l l l), is part of the great wall of the court of the caſtle.

At (i i), is a ſteep precipice of rock.

And at (k k), is the river *Nid*.

* There is indeed alſo another modern, forced entrance; but I avoid taking any notice of it, to prevent confuſion in the plan.

IT is very probable, that ſomewhere in the lower vaults of the keep was a well for water; but to them I could not obtain acceſs, they being uſed as wine-vaults, and carefully locked up; and it not being in my power, whilſt I ſtaid in this place, to obtain the key.

FROM ſome arches remaining, on the inſide of the walls of the Keep, it appears plainly, that the room, on the firſt and principal floor, where the great arched portal is, had an exceeding fine arched roof of ſtone-work; and we may eaſily conceive, that the ſtate apartments above were not leſs magnificent. In theſe probably it was, that Richard II. was firſt confined, and treated with marks of honor and reſpect, before his removal to the wretched dungeon at Pontefract, where he ended his days in miſery.

SUCH was the caſtle of Knareſborough; which Leland truly ſays*, "ſtandeth magnificently and ſtrongly, on a rock, having "a deep ditch hewn out of the rock, where it was not de-"fended with the river Nid; and where, in his time, he num-"bered eleven or twelve towers, *one being very fair:*" which was doubtleſs that I have been juſt deſcribing.

WITH this then I ſhall conclude the deſcription of the *irregular* kind of caſtles, that were builded, in the interval between the Conqueſt and the end of the Reign of Henry III.

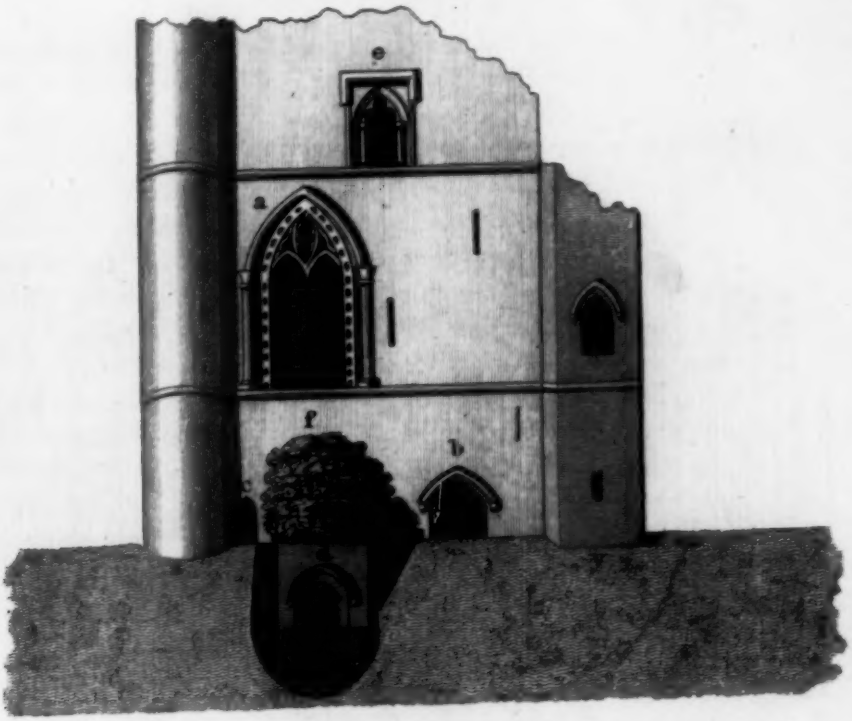
To theſe ſucceeded the magnificent piles of Edward I. more convenient, more ſtately, and containing not only many towers, but great halls, and ſometimes even religious houſes. Their general plan is ſo well underſtood, that they need no particular deſcription here: a minute account of them, therefore, would only ſwell the bulk of this paper unneceſſarily, which is perhaps already too long. No one can be ignorant of their grandeur, whilſt the caſtles of Conway, and Caernarvon, in Wales, remain.

I HAVE only therefore to obſerve, that many of the more ancient caſtles had ſubſequent additions made to them, in imita-

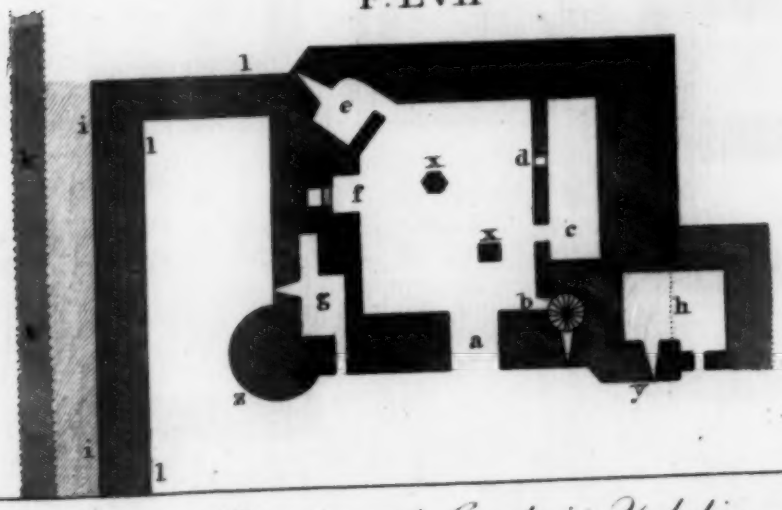
* Leland's Itinerary, fol. 102.

tion

F. LIV



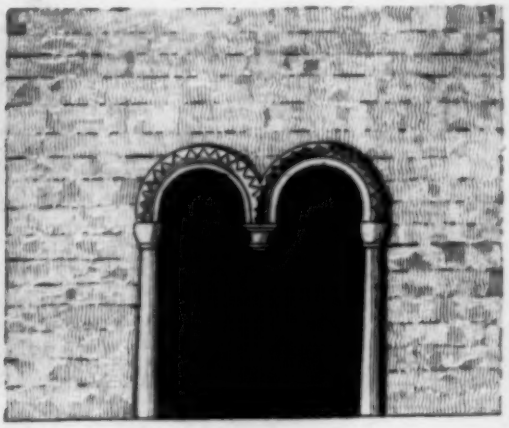
F. LVII



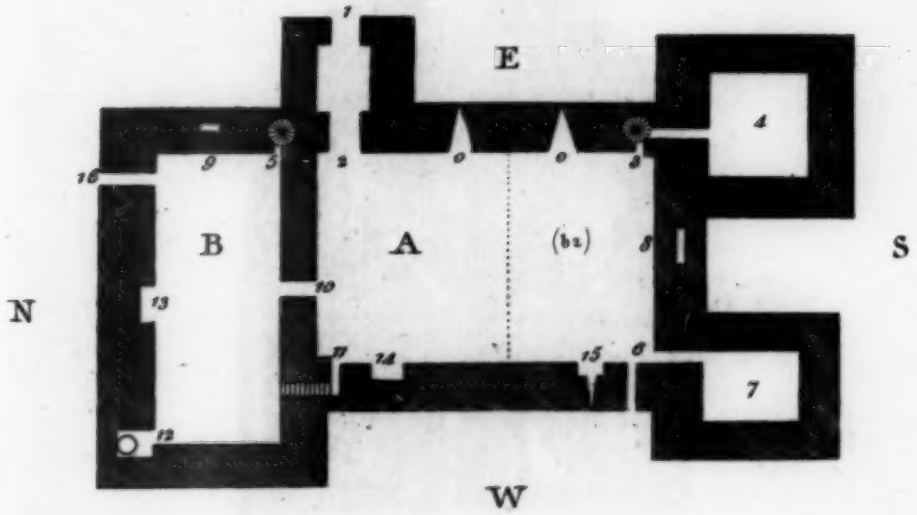
Knaresborough Castle in Yorkshire.

F. LV

F. LVI



F. LVIII



Gothic Door-Ways; and Plan of Harewood Castle, in Yorkshire.

LVI
3

LVI
2

Hughes

Door Ways, in the Cloysters, at Westminster.

tion of this noble ſtyle; the remains of which may now miſlead an incautious obſerver: and that many fortreſſes, which in their more enlarged and improved parts reſemble the caſtles of Edward I. and even of later ages, have yet *old* Keeps, of the firſt and moſt ancient times: of which there is a moſt remarkable and exceeding curious inſtance, at Arundel caſtle in Suſſex, belonging to his Grace the Duke of Norfolk; and another alſo of ſomewhat the ſame kind, at Corſe caſtle, in the Iſle of Purbeck, in Dorſetſhre.

After the age of Edward I. (who both improved our laws, and introduced much elegance, and many degrees of civilization into our modes of life) we find another kind of caſtles ſoon introduced, approaching nearer to the idea of modern palaces.

The firſt of theſe was that at Windſor, built by Edward III. who employed that ingenious and excellent Prelate *William of Wykeham*, as his architect *, and made him the overſeer of

* Stow's Annals, p. 264. The account given of this matter, by the Biſhop of London, is ſo exceedingly curious, and contains ſuch an illuſtration of the manners of the times, that I cannot forbear to inſert the heads of it. The 30th of October, 1356, Wykeham was made ſurveyor of the King's works, at the caſtle, and in the park of Windſor. By this patent he had powers given him to preſs all ſorts of artificers, and to provide ſtone, timber, and all other materials, and carriages. He had *one ſhilling* a day while he ſtaid at Windſor, *two ſhillings* when he went elſewhere on his employment; and three ſhillings a week for his clerk. It was by the advice and perſuaſion of Wykeham, that the King was induced to *pull down* great part of the caſtle of Windſor, and to rebuild it in the magnificent manner in which, upon the whole, it now appears. In 1359 Wykeham was appointed chief warden of Windſor, and other caſtles named in the appointment: and in 1360, workmen were impreſſed out of ſeveral counties, by writs directed to the ſheriffs, for carrying on the work at Windſor; who were to take ſecurity of the ſaid workmen, that they ſhould not leave Windſor without licence from Wykeham. This great, ingenious, and I may add, moſt truly (conſidering the diſadvantages of the times he lived in) this good man, was not made Biſhop of Winchester till 1366.—Lowth's Life of William of Wykeham, p. 19. 21. 24. 39.

his works. Here was extant, therefore, in consequence of these works (even prior to the additions and improvements made by Queen Elizabeth), a truly *magnificent palace*; but yet strongly walled, embattled, and defended as a strong castle; and having a round keep adjoining, built also by Edward III.

STOW informs us*, "that Edward III. called together a "great many artificers, to the castle of Windsor, in the year "1344, and began to build an house, which was called the "*Round Table*; the floor whereof, from the centre, or middle "point, unto the compasse, was an hundred feet, and the cir-"cumference thereof six hundred;" (and in another place, says,) "that in the year 1358, he began the new building of the "castle at Windsor, where he was born; but that the *Keep*, "*called the Round Table*, was begun in the 18th year of his "reign." We must not, however, conclude from hence, that this round Keep was devised either by Edward III. or Wykeham; or that it was a species of building in much use at that time: for, on the contrary, it seems merely to have been a repair; or to have been re-erected, on a larger scale, in imitation of the original Norman castle, that was built on the same spot long before; and most probably in the early part of the reign of William the Conqueror; since it is certain†, that he, being delighted with the situation, gave lands in Essex in exchange for this spot; and built there a place of residence, which Henry I. made additions to, and fortified more strongly. And it is remarkable, that the Keep was rebuilt by Edward III. before Wykeham was employed, and before he had any opportunity of communicating his magnificent and elegant ideas.

THIS convenient and enlarged style of building, which began to be introduced by Edward the First, and was finally improved

* Stow's Annals, p. 239. † Gibson's Camden, p. 145.

by

by Edward III. we may eaſily imagine would ſoon be imitated by the nobles of the Realm, on a leſſer ſcale. Accordingly, amongſt others, we find *two* very remarkable ſtructures, one at Harewood, and the other at Spofford, in Yorkſhire; the nature of which, without this conſideration, is hardly to be underſtood; but which do both of them greatly illuſtrate what is here ſaid. The odd mixture of convenience and magnificence, with cautious deſigns for protection and defence, and with the inconveniences of the former confined plan of a cloſe fortreſs, is very ſtriking.

At Harewood was a caſtle in very ancient times; Camden giving us an account of one ſituated there, even prior to the reign of King John *. He by no means, however, fixes upon any date, as to the time of the erection of the building ſubſiſting in his days, and which now remains.

Some part indeed of the walls of the main body thereof, both from what he ſays, and from certain particularities in its conſtruction, may be deemed of conſiderable antiquity; though now greatly altered: but the whole of the edifice, in its preſent form, may fairly be concluded to have been chiefly built about the time of Edward I. and to have been compleated in the reign of Edward III. if any regard is to be paid to the ſtyle of architecture; and if any inferences may be drawn from the very peculiar ornaments, in different parts of this caſtle.

Fig. LVIII. is a plan of the whole, as it now remains †.

At (1) is the firſt, and outward grand portal: not raiſed up high like thoſe of Gundulph; but ſtanding *here* upon the ground, and leading into a ſort of porch, formed by an high adjacent ſmall tower. This portal is lofty enough for a man to enter on horſe-back; and juſt within the gate of it, is the groove for a vaſt portcullis.

* Camden, p. 714. † See Pl. XLIII. p. 326.

AT (2), is the ſecond great gate; and the ſecond inner portal; of the ſame dimenſions and conſtruction, as the former.

(3) is the principal ſtair-caſe, which does not reach down to the ground, but only goes as low as the firſt floor; and from thence to the great rooms above; but communicates alſo the whole way, with the four ſmall rooms, that were in the little tower (4), one above another. The places for the floors of theſe rooms are ſtill very plainly to be diſcerned in the walls; and in every one of them was a fire-place, and a window.

AT (5), is the leſſer ſtair-caſe; which both goes down to the ground, and even to the vaults beneath, and alſo up to the top of the caſtle; but though ſo near to it, does not communicate at all with the tower of entrance in the lower part.

BETWEEN (2 and 3), within the ſubſtance of the wall, are galleries (like thoſe in Gundulph's towers) communicating with the apartments above, and the ſtair-caſe; and with the places above, for working the portcullis, over the tower of entrance.

AT (o o), are loop-holes, defended in the uſual manner; and in the apartments above are large open windows.

(6) is the preſent entrance; but if there ever was one in this place originally, it could only be a ſmall ſally port.

(7) is another tower, ſmaller than the former at (4); but having, in like manner, four different apartments, one above another; each of which had a fire-place, and good light; and communicated with the great rooms above and below, by narrow paſſages.

AT (8), is a very curious and large well, for drawing up timber and warlike machines.

AND at (9), is another, of the ſame conſtruction.

BOTH of theſe have great arches at bottom, to make room for turning the beams: but the arch at (8) is larger, and of more noble conſtruction than that at (9).

(13)

(13) is a large fire-hearth; the chimney of which is of a different form from that of theſe wells; as are alſo the chimneys in the walls above; where they may moſt plainly be diſtinguiſhed, in almoſt all the apartments.

(10) is a large pointed arched door-way, forming a communication between the great rooms (A and B).

And (11) is a narrow arched paſſage, having a ſteep flight of ſteps, deſcending in a ſtreight line to the great vault, under the room (B).

In this vault is the arch under the great well (9); and here, alſo, at (12), in a little receſs, was the well for water; the pipe of which was cleared out, about ſeven years* ago, to the depth of eighteen feet; but it is now filled up again.

Here alſo, at (16), was a ſally-port.

In the great room (A) is a receſs, at (14); where ſeem to be remains of ſteps leading down to a dungeon.

And at (15) is an appearance, that greatly ſurprizes one in ſuch a building; being (as far as the eye can judge) a moſt remarkable Tomb, of great elegance and magnificence; yet ſo conſtructed, that it alſo forms a receſs, that might ſerve for the ſtation of a croſs-bow man, at the back of which is a narrow loop.

It is repreſented, Fig. LIX.; and whether it was, what I have ventured to call it, *a tomb* of ſome governor, who deſired to be here interred; or whether it was deſigned as a ſort of altar (the only purpoſe it could ſerve for, if it was not a tomb) it ſeems to indicate, that the great room (A) was divided originally into two apartments, by a partition wall; and that one of theſe apartments (b 2), at ſome time or other, ſerved for a chapel.

The ſtyle of this monument agrees with the remains of of tombs we ſo frequently meet with in ancient cathedrals, of the age from the time of Edward I. to that of Richard II.

* I had this information from a man who was employed in clearing it out.

ONE or two circumſtances more are very remarkable, with regard to this caſtle. The *firſt*, that in the apartment above, juſt over the ſecond great portal, at (2), is a very large magnificent door-way, looking like an ancient great entrance, of which I have given a repreſentation, (Fig. LX.), and which has three eſcutcheons of arms over it: two whereof do each contain a lion rampant, charged on the breaſt with a fleur de lis, and the third contains an orle. But what is very extraordinary, this great arch only leads out into the ſmall room in the upper part of the tower of entrance, where, nevertheleſs, there could not poſſibly be any communication with the grand entrance below; and it ſeems unconnected with any other parts, except with that little room and with the galleries in the wall: and yet, from the eſcutcheons of arms both over it, and in that ſmall room, it muſt probably have been deſigned for ſome important uſe, at the time it was conſtructed.

THE *other* remarkable circumſtance is, that in the end walls of the great central room above, are manifeſt marks of an high-ridged roof having been let in, over the ſtate apartments, but beneath the high parapet wall, and ſo as to leave room for a platform, externally, on each ſide upon the leads above, ſecured by the parapet, and fitted for the purpoſe of placing engines of war, or even cannon; which, after the time of Edward III. were often uſed, and not unfrequently placed on the tops of high buildings, in caſe of neceſſity.

THIS latter circumſtance needs no explanation: and the former may be cleared up, and accounted for, by a little reflexion on a moſt curious *Survey* of this caſtle, made by Robert Glover Eſq; Somerſet Herald, in the year 1584; and recorded by Sir William Dugdale, in his curious Manuſcript of Yorkſhire Monuments, preſerved in the Office of Arms. Both of theſe I have been favoured with a ſight of: and they, together with ſome other facts mentioned in the records of that Of-

4 fice,

fice, will enable us to underſtand, how this great arch came to be made, and placed where it is; and will confirm all that has been ſaid, relating both to the æra of the building, and that of the material alterations made in the ſtructure of this caſtle.

Sir William Dugdale, in that Survey, calls the little apartment over the porch, *the chapel*: and deſcribes, and delineates, the twelve ſhields of arms, which appear, cut in ſtone, in the freeze above, all round the room. Moſt of them are well known to our heralds: and appear, on examination, to be thoſe of

1. Sutton.
2. Aldburgh.
3. Baliol.
4. Baliol, with a label for difference.
5. Aldburgh.
6. Thweng.
7. Bordeſley, or Graunceſter.
8. Aldburgh, impaling Sutton.
9. Conſtable.
10. Roſs.
11. Vipont.
12. ———.

They are all repreſented and properly numbered, plate XLVI.

He further deſcribes, and delineates alſo, the three ſhields of arms, which I have already deſcribed; and which are in like manner, cut in ſtone, over the great arch of entrance in queſtion; and are repreſented (Fig. LX.) That in the midſt, over the point of the arch, which contains the orle, is the arms of Baliol *; and the other two ſhields, which contain each of them a Lion rampant, charged on the breaſt with a fleur de lis,

* It may deſerve conſideration, whether this coat of Baliol may not have been ſo often repeated, in the ornaments of this building, in conſequence of ſome former remarkable attachment of the Aldburghs to the intereſts of that illuſtrious houſe: but I know of no facts at preſent ſufficient to elucidate this matter.

are

are the arms of that branch of Aldburgh which poſſeſſed Harewood caſtle; the fleur de lis having been given to them, to diſtinguiſh this from the Elder houſe.

Now it further appears, from the records of the Office, that this eſtate of Harewood was in the poſſeſſion of William de Meſchines, lord of Harewood, in right of Ceciley de Rumelli his wife, about the time of the conqueſt: from whom, by various deſcents, it came into the poſſeſſion of Robert de Inſula, or *De l'Iſle*, in the time of Edward the Firſt;—(the ſon of the famous Fulk de Brent, one of the favorites of king John.) It appears further, that this caſtle, after that, came into the poſſeſſion of the Aldburgh family, by a deed of gift to Sir William de Aldburgh, from Robert de Inſula, or *De l'Iſle*, called Lord Liſle of Rugemont, in the 38th year of Edward the Third; on Sir William de Aldburghs marriage with Eliza, one of the daughters and coheireſſes of that Lord. And, after that, it came into the family of the Redmans, by the marriage of the daughter and heireſs of this very Sir William de Aldburgh with Sir Richard Redman, her ſecond huſband, in the time of Henry IV.*; and in that family it continued, and was alſo inhabited by them as their principal manſion, till the time of queen Elizabeth.

IT is clear, therefore, that it was in the poſſeſſion of the Aldburghs, during the life *only of one lord*; who obtained the poſſeſſion of it, in the time of Edward III. and yet it appears, that amongſt the arms in ſtone, in what Sir William Dugdale calls the chapel (the little room above the porch), thoſe of *Aldburgh* are repeated no leſs than three times over; and are ſeen alſo on the two moſt diſtinguiſhed ſhields over the great arch of entrance

* There is a very curious tomb of the Redmans, in the church at Harewood: In the ſame church alſo is a fine tomb of the famous Sir William Gaſcoigne, chief juſtice in the reigns of Henry the IVth and Vth, ſo greatly celebrated by Shakeſpear, for having dared to commit the latter to priſon whilſt Prince of Wales. Upon this tomb is a figure exceedingly well wrought in alabaſter, and ſuppoſed to be a good likeneſs: his family was nearly related, by intermarriage, to that of

to

F. LX

F. LIX

Great Door way & Tomb in Harewood Castle.

to it; whilſt at the ſame time it is no leſs remarkable, that of all the other ſhields of arms, not one belong to any families who were owners of this caſtle, *ſubſequent* to the time of the Aldburghs: a fact eaſily aſcertained (even with regard to the ſhield of arms whoſe owner is unknown) by examining the bearings, and comparing them with the arms of thoſe families who are well known to have been in the poſſeſſion of that eſtate, from the time we ſpeak of and downwards. This chapel and arch, therefore, could not well have been conſtructed either before or after the time of the one only lord of the Aldburgh family who poſſeſſed it.

ARMS of the families ſubſequent to his time there were, in other parts of the caſtle, at the time Glover made his ſurvey; which he has carefully delineated; and which I have alſo repreſented in the lower part of plate the XLVI. for the ſake of comparing them with the former: N° 13. was enamelled on metal, and put up in the great chamber, and contains the arms of *Ryther* with quarterings: *viz.* 1. *Ryther.* 2. *Totheby.* 3. *Fortibus* Earl of Albemarle. 4. *Aldburgh.* 5. Lord *Liſle*, or de Inſula. 6. *Fitzwilliam.* 7. *Bellerve.* 8. *Ryther*, N° 14. was painted (probably on glaſs) in the ſame chamber, and contains *Redman* quartering *Aldburgh.* N° 15. was it ſhould ſeem painted on glaſs in the chapel, containing *Ryther* ſingle. And N° 16. and 17. were in other parts of the caſtle *. The former containing *Reaman* quartering *Aldburgh*, and impaling *Strickland* of Sizergh in Weſtmoreland; and the latter containing *Redman* impaling *Huddleſton* of Millom caſtle in Cumberland. But it is very remarkable, that all theſe latter appear to have been mere paintings on *wood*, *glaſs*, or *metal*, and to have had the proper *blazonings*; whereas the ancient arms were in ſtone, placed round the freeze of the ſmall apartment we are ſpeaking of, and had no blazonings at all.

* The three half moons were the arms of the *Rythers*; and the three cuſhions the arms of the *Redmans*.

NOTHING

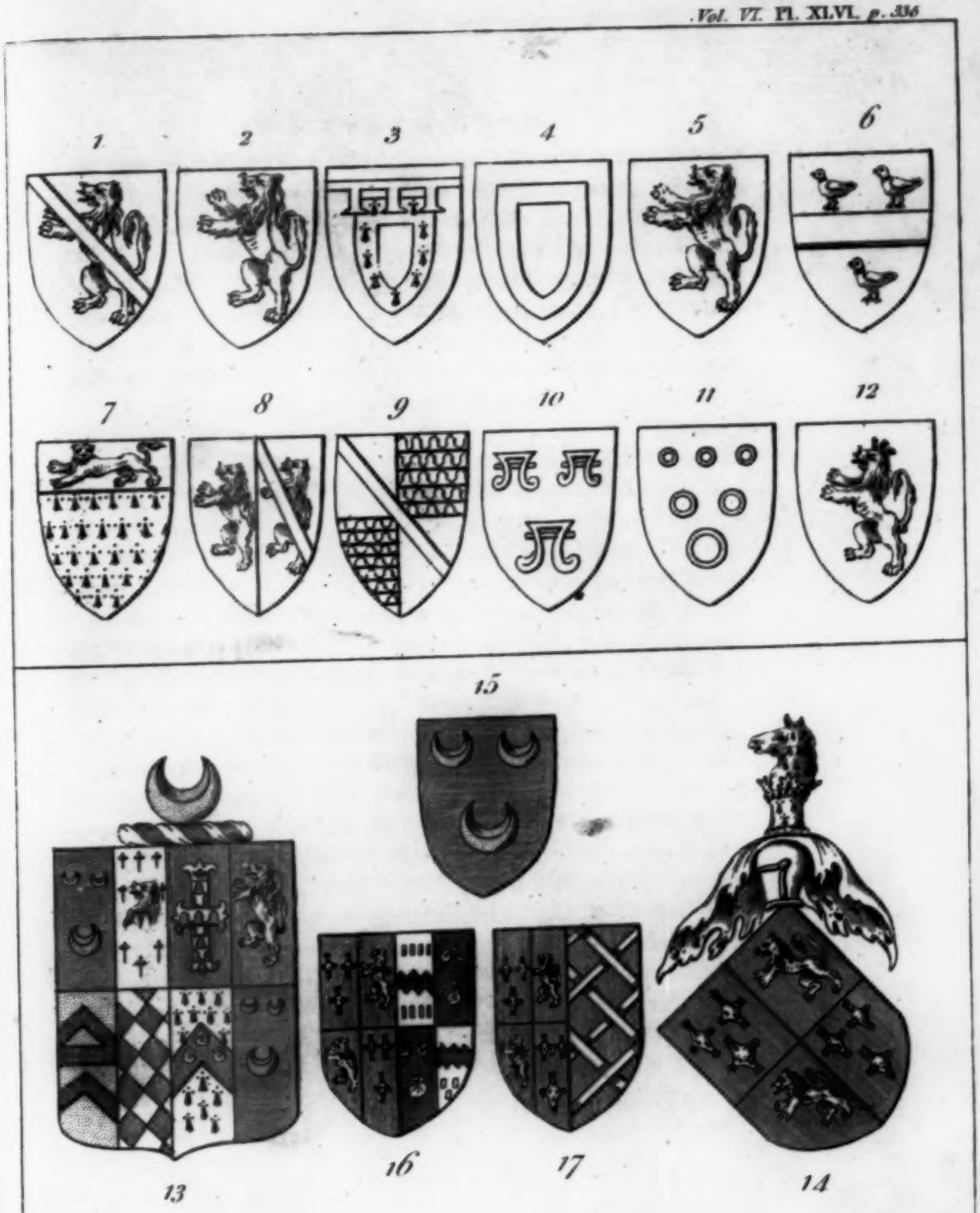
NOTHING then ſurely can be clearer, than that this little room, called the chapel, and the great arch in queſtion leading to it, were conſtructed, and adorned by William de Aldburgh *, *in the time of Edward the Third*, when this new chapel was probably firſt formed in this place over the portal, in lieu of the old one, in the other part of the caſtle, on the floor beneath, where the ancient tomb is placed; that original one, being in all likelyhood thought, whilſt placed in ſuch a ſituation, to interfere too much with the accommodations wanted for other purpoſes. In ſhort it moſt clearly appears, that this arch was deſignedly made of ſuch magnitude, and with ſuch magnificence, merely on account of its leading to an apartment, which, though ſmall, was yet deſtined for ſacred uſe.

AND whilſt this concluſion accounts for the appearance of this arch, without having recourſe to the idea of its ever having been any original entrance to the caſtle; and ſtrongly confirms all that I have ſaid, concerning the caſtle being compleated, in imitation of the ſtyle of building introduced by Edward the Third, there appears alſo, on the whole, from every other circumſtance that can be collected, either from the remains of the building itſelf, or from the records preſerved concerning the poſſeſſion of it, the fulleſt reaſon to be convinced, that this noble pile was firſt built by *Robert de L'Iſle*, in the time of Edward I.; and then improved, and perfected, by *Sir William de Aldburgh*, in the time of Edward the Third. Whoſe arms, I have further to obſerve, are moreover, together with thoſe of Baliol, on the outſide of the porch, having a motto placed under them, but ſo high, as not to be legible without the aſſiſtance of a long ladder, which I had not.

Perhaps the idea of there having been an ancient and original chapel, on the floor beneath, in the time of Edward the Firſt, and a new one ſubſtituted in the room of it, over the porch, in

* He had a ſummons to parliament in the 44th year of Edward III. and in ſeveral ſucceeding years of that king, and of Richard II. ſee Dugdale's Summons.

the



Arms in Harewood Castle.

the time of Edward the Third, may to ſome perſons appear too hazardous; and therefore I am by no means eager to inſiſt upon the truth of it; being led to form ſuch a concluſion, only by the unqueſtionable and extraordinary appearance of a *tomb*; which, after all, may have been placed there, by ſpecial direction of ſome proprietor, or lord of this caſtle, who might deſire to be interred in or near this ſpot, in conſequence of ſome odd partiality and prejudice; without any regard either to the ſacredneſs, or want of ſanctity of the place.

Spofford Caſtle, in Yorkſhire, is a ſtill more extraordinary ſtructure than *Harewood*. It was one of the firſt ſeats of the noble family of the Percies, Earls of Northumberland: and tradition ſays, that Henry de Percie procured a licence, in the ſecond year of Edward II. to fortify his caſtle here. We may fairly expect, therefore, that theſe ruins, which have every mark of original antiquity, ſhould bear ſtrong traces of the improvements made about the time of Edward III, and in the next ſucceeding reigns: and the rather, as this habitation has been, for ſo many ages, entirely deſerted by the noble family to which it belonged, and has been left juſt in the ſtate it was.

However, before I proceed to the deſcription of this caſtle, I cannot but make a ſhort digreſſion, for the ſake of relating what appears to me to be a curious circumſtance, tending to the illuſtration of the hiſtory of this Country; at the ſame time that it ſhews the original power, ſplendour, and dignity of the Percie family, beyond that of almoſt any other Norman Barons in theſe parts.

In the very ancient church of Spofford, is a moſt curious antique monument, having a cumbent figure, placed croſs-legged, upon it, which has moſt commonly paſſed (as there is no inſcription) for the tomb of a *Knight Templar* of the Percy family; becauſe on a large ſhield, which covers the breaſt of the figure,

 are

are moſt obviouſly the arms of the Percies, as repreſented Fig. LXI. only there is a ſmall difference, of an eſcallop ſhell, inſerted in the centre of each of the fuſils. This tomb is repreſented Fig. LXII. But, notwithſtanding the local tradition concerning it, on inveſtigating this matter in the Office of Arms, (where this very monument is recorded, and a drawing thereof preſerved,) it appears, that the common account given of it is a miſtake; and that the monument actually belongs to one of the *Plumptons*; which family was a very conſiderable one, and on account of their being dependants upon, and holding lands of the Percies, as *meſne lords*, bore the Percy arms, with the difference abovementioned in token of their ſubordination *. A cir-

* On having occaſion to mention theſe ancient coats of arms, and theſe peculiar circumſtances relating to them, I cannot forbear obſerving, that although a common opinion has prevailed, concerning the firſt introduction of *armorial bearings*, that it was an invention adopted during the firſt cruſade, to diſtinguiſh chieftains and their followers in battle; yet there is much reaſon to doubt the truth of this idea: for one can hardly conceive, why ſuch diſtinctions ſhould be thought of, or deemed more important in *that* war, rather than in the preceding wars during the greatneſs of the Roman Empire; when full as many different nations were often embattled on one plain: and, beſides, there are two remarkable paſſages in Tacitus, which ſeem to me to imply, that ſuch armorial bearings were in uſe amongſt the Germans long before. They are theſe following, which I ſubmit to the conſideration of the judicious reader.—

Scuta tantum lectiſſimis coloribus *diſtinguunt*.——

Scutum reliquiſſe, præcipuum flagitium: nec aut ſacris adeſſe, aut concilium inire, ignominioſo fas: multique ſuperſtites Bellorum, infamiam laqueo finierunt.

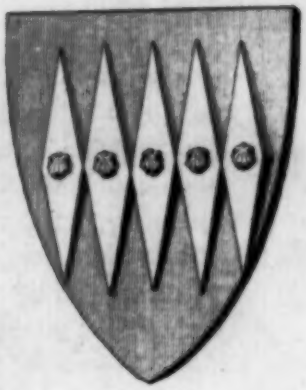
TACITUS, De Moribus Germanorum, Sec. VI.

I muſt only beg leave to add, that as there are no more than ſeven colours, and ſo very few different ſhades formed by the compoſition of them, the ſhields of the numerous families of the Germans, could not well be *diſtinguiſhed* by colours *alone*, without the addition of *various forms and figures*; which addition conſtitutes the very eſſence of *armorial bearings*, in the ſtricteſt ſenſe of the words. Probably, therefore, our coats of arms, as well as our laws, and the foundation of our liberties, were brought from the foreſts of the North.

cumſtance

F. LXIII

F. LXI



F. LXII

Basire

Arms and Tomb ..... in Spofford Church

cumstance that may be still further accounted for, by considering, that such lands must, in the case of this family, have been holden by what Littleton calls *Homage Aunceſtrel*: that is (to use his words), "where a tenant holdeth his land "of his lord by homage; and the *same tenant*, and his an- "cestors, whose heir he is, have constantly holden the *same land* "of the *same lord*, and of his ancestors invariably. It is called "Homage Aunceſtrel, by reason of the continuance there hath "been by title of prescription, in the tenancy, *in the blood* of "the tenant, and also in the seigniory in the blood of the lord:" (which indeed formed a kind of relationship, that may well enough account for the bearing of the same arms). And it is remarkable, that the lord, in this case, was bound to acquit the tenant against all other lords paramount, of every service: and if the tenant aliened to another in fee, the *legal relationship* was dissolved thereby; insomuch that the alienee was no longer tenant by homage aunceſtrel, but by homage like unto knights service *.

THE short history of this family of the Plumptons is very remarkable. Eldred de Plumpton, appears from Domesday Book †, to

* See Coke Littleton, fol. 100. b. 101 and 103, and 74, b.

† Doomsday Book, in Terra Willi de Percy. "In maner. de Plon- "tone hb̄ Gamelbar II. car. tre ad gld̄ et I. car. pot. ibi ee'. Nc̄ Eldred "(de Plompton) ten. de Willo. Ibi sunt VIII vill. et X bord. cū III "car. et II ac. pti. T. R. E. val. X sol. modo similit."

It is worthy of observation, that the manor of Haselwood in this neighbourhood, which was also held of William de Percy, by the family of Vavasour, when Doomsday-Book was made, has to this day continued regularly in the male line of that ancient house, except for a short time, in the reign of Henry III. when it was *in pawn* to *Aaron a Jew* at York, for the sum of 330l; who made a conveyance of this security to Queen Eleanor, in discharge of a debt due to her (or assigned by the crown), from whom *John de Vavasour* received it again, on payment of the money, by a very curious deed of conveyance, remarkable for its brevity.

to have been a dependant upon, and to have held lands of William de Percy, at the time when that great ſurvey was taken, in the twentieth year of the reign of William the Conqueror: and in his family thoſe lands continued, in a regular uninterrupted courſe of deſcent, in the male line, till within theſe forty years; when it at laſt ended, on the deceaſe of Robert Plumpton, Eſq; from whom the eſtate went to Anne his aunt, who ſold it to the preſent poſſeſſor Mr. Laſcelles.

Amidst the various anceſtors in the courſe of this long deſcent, one was particularly diſtinguiſhed above the reſt, Nigell de Plumpton, to whom William Eſtoteville, lord of Knareſborough, in addition to the land held of the Percies, granted the whole lordſhip of Plumpton, in the time of Henry II. This Nigell died in the fourteenth year of King John; and from the dreſs of the cumbent figure, the form of the arms, the legs being croſſed, and every other circumſtance in the appearance of this ancient tomb, it may fairly be concluded to have been his ſepulchre.

Besides this tomb, there is one other fragment of antiquity alſo on the walls of this old church, relating to the Percies, that deſerves, on account of its connection with the caſtle we are mentioning, to be taken notice of. On the outſide of the South wall is a very ſingular large ſquare ſhield, like that of a *knight banneret*, with a ſmall ſhield over it; both of them carved in baſſo relievo in ſtone; and the former containing *thoſe* arms of the Percies, diſplayed in a moſt remarkable manner, which they bore *before* their own proper coat, in conſequence of intermarriages with the houſes of Brabant and Lucy.

I am indebted for this anecdote to my curious, learned, and reſpectable friend John Charles Brooke, Eſq; Somerſet herald, to whom I deſire here to make my acknowledgements, for his kind aſſiſtance in enabling me to ſearch the records of the Office of Arms; and for the great information he has given me, with regard to the matters contained therein.

The

THE hiſtory of theſe ſingular bearings is as follows: with regard to the firſt, *the lion rampant*; Agnes de Percy, who inherited the eſtate of the family in the reign of Henry II. was married to Joſceline, a younger ſon of Godfrey the firſt Duke of Brabant; but, being an exceeding great heireſs, would not conſent to take him for her huſband, unleſs he would either aſſume her name, or arms; upon which, by the advice of Queen Adeliza his ſiſter, widow of King Henry I. he took her name of Percy, but retained his paternal arms, *or, a lion rampant, azure:* and the old bards of the Percy family compoſed theſe lines on the occaſion.

Lord Percy's heir I was, whoſe noble name
By me ſurvives unto his laſting fame;
Brabant's Duke's ſon me wedd, and for my ſake
Retained his arms, and Percy's name did take.

AND, with regard to the ſecond bearing, *the three fiſhes*; Henry (who was created *firſt* Earl of Northumberland, at the coronation of Richard the IId) married, for his ſecond wife, *Mauld*, daughter of Thomas Lord Lucy of Cockermouth (ſiſter and heireſs of Anthony her brother); by whom he had no iſſue; but, notwithſtanding, ſhe on her deceaſe gave all her lands to her husband, on condition that he and his heirs ſhould for ever after quarter and bear her arms *the three lucies hauriant argent*, next to his own, and before the Percie arms.

BOTH theſe coats, with the original *one* of the Percies, *azure, five fuſils in feſs, Or*, are given properly quartered in the arms of the firſt Earl, by Brook, in his curious catalogue; and their being here, on this ſhield at Spofford, without it, ſeems to indicate, that as this ancient baſs-relief was certainly put up after the latter event had taken place; ſo that it was put up *very ſoon* after, and as a ſort of commemoration of ſo remarkable a circumſtance attending the fortunes of that noble family; and this,

ſeems

ſeems the rather probable, becauſe ſhortly after this time the Spofford eſtate ceaſed to be the place of their reſidence.

BOTH the great ſhield and the ſmall one, are repreſented Fig. LXIII.; and it is remarkable, that the quarterings are made without any diviſions by lines.

HAVING explained this little circumſtance relating to the hiſtory of this illuſtrious family, which helps to ſhew during what period they were reſident on this ſpot; let us now proceed to the deſcription of this curious pile; Spofford Caſtle; which the Percies were lords of, and in which they dwelt, even before Alnwick or Warkworth came into their poſſeſſion; though it was finally embattled, compleated in its preſent ſtyle, and declared to be a caſtle, only about the time they obtained thoſe other great inheritances.

IT was clearly one of the ſtructures built about the time of Edward the Third, in imitation of the ſtyle of architecture then introduced: when the idea of the cloſe, compact, well ſecured *Keep* was nearly laid aſide; when that, even of *the caſtle*, began to be conſidered as of importance in *name*, rather than in reality; and when the idea of the convenient hoſpitable *palace* was adopted, and brought into uſe. And the appearance of the remains of the edifice proclaims all theſe circumſtances, as effectually as the hiſtory of the *Æra* in which it was erected.

FIG. LXIV. is a plan of Spofford caſtle, in its preſent ſtate.

(a), is the principal entrance; narrow, and ſmall, and on the level of the ground, which is here a compleat bank of rock, ending in a low precipice within the caſtle, and affording opportunity for lower apartments at (A), and alſo under all the rooms.

(b), is an arched door-way; directly oppoſite to the principal entrance, and leading to the room over the dungeon: the door of the dungeon itſelf being in the vault immediately under this arch.

(c), is a large arched receſs, on the right-hand, in the ſame room; having, in the floor of it, a ſort of well, or trap, ſtill left

open, and remaining entire, which was manifeſtly made for the purpoſe of letting priſoners down into the dungeon, without opening the door. The intended uſe of it cannot be miſtaken: for this ſtrange well, and excavation in the wall, could never have been deſigned either for a fire-place, or for drawing up beams; becauſe there is a ſolid arch in the wall over head at the top, and not the leaſt perforation for letting out ſmoke; and becauſe there is no room for turning of beams, to be drawn up, at the bottom. It is very remarkable alſo, that this trap, which is of large dimenſions, was not only incloſed on the three ſides with the wall, but alſo by large ſlabs of ſtone, on the ſide next the dungeon, leaving only juſt room enough at bottom for the priſoners to creep into their diſmal priſon.

In this wretched vault was alſo a flue, at (k), for the conveyance of air, as at Canterbury.

There was, beſides the dungeon and room over it, a third room above, in this tower; the dimenſions of which, as of the others, are as ſet down in the plan.

(d) is an entrance now forced through the wall; but there manifeſtly never was any here originally.

At (e), adjoining to a large room (C), is the principal ſtaircaſe.

And at (i), a magnificent large window; the only one on the ground floor; yet ſuch an one, that the caſtle never could be a place of ſtrong defence, at any period, whilſt it exiſted.

At (f), is a great fire-hearth; the chimney of which is, in the uſual manner, concealed in the wall; and near adjoining is a loop at (o).

Conſidering, therefore, the near adjoining ſituation of the dungeon, at one end; and the fine window, beſpeaking ſtatelineſs, at the other; and the great length of this room, in proportion to the breadth; it is probable there was a partition wall at (l).

From

FROM this apartment is an arched paſſage, to the room at (B); whoſe dimenſions are given in the plan.

AND here, at (m), is a ſquare receſs in the wall, like a very large cup-board, which, I confeſs, I do not know how to account for, and therefore I leave it as a matter of inveſtigation for others. The proportions of this room, and its want of air and light, ſeem to indicate that it was only a vault for ſtores.

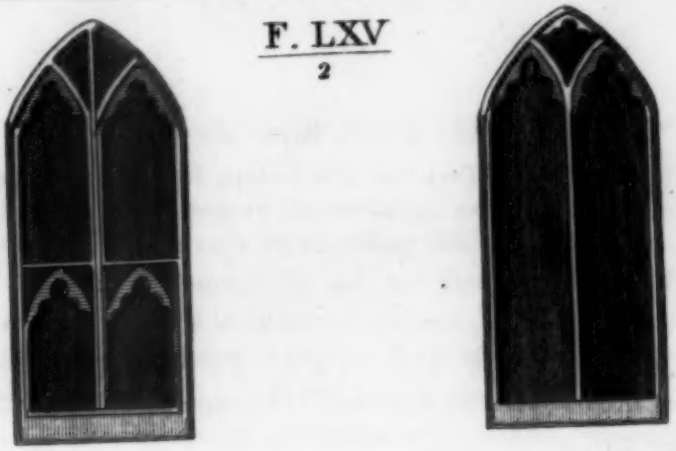
So alſo was the lower part of the great room (A), between the ridge of rock and (n p); it having only loop-holes. Yet here was, at (g), as far as I was able to conclude, a well for water: and near to it a ſort of gallery in the wall. I am perſuaded, however, there muſt originally have been another well ſomewhere, in one of the apartments (B or C).

ABOVE was a moſt magnificent hall; the walls of which are ſtill entire. It was 75 feet 10 inches in length, and 36 feet 9 inches in breadth; and has great arched windows, like thoſe in cathedral churches, of a magnitude and form that was not introduced at all in the walls of caſtles till after the time of Edward the Firſt; nor allowed to be placed in any ſuch manner as here, till the cautious modes of defence were laid aſide, and beginning to become obſolete. There are alſo two great doors, at (h h): it could, therefore, certainly, never have been conſidered as any *defenſible* part of the building. And it is remarkable, that it is ſo contrived, as to be quite detached from all the other apartments; having no communication therewith, except merely by a ſmall arched door-way at (q); ſo that this defenceleſs part might, in caſe of neceſſity, be quite ſhut out, and cut off from the reſt.

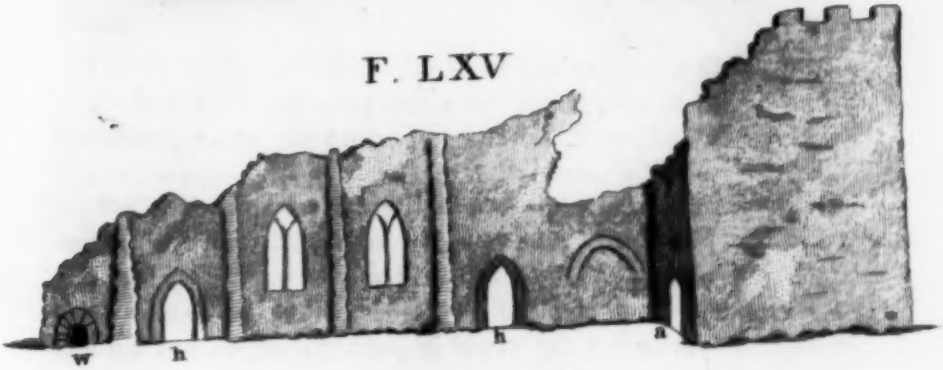
WHAT the other apartments in this building, in the ſtories above were, cannot now be accurately aſcertained.

FIG. LXV. repreſents the remains of the Eaſt front, as it now appears; where (a) is the door of entrance: (h h) ſhew the

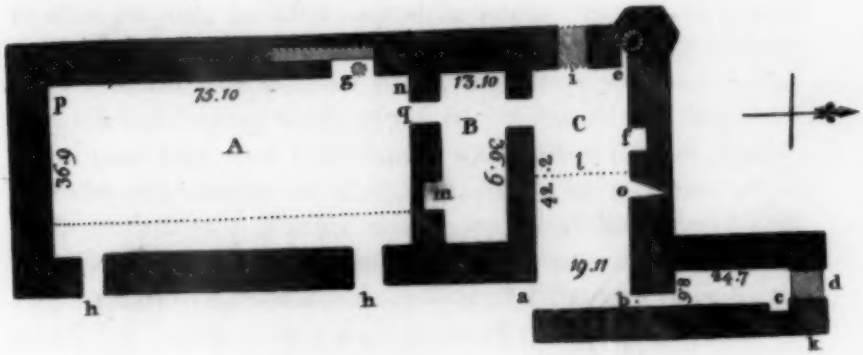
F. LXV
2



F. LXV



F. LXIV



Sayer sc.

Spofford Castle in Yorkshire.

two great doors of the great hall; and (w) a low arched doorway, in a projecting part of the building, not repreſented in the plan, which led, through an exceeding thick wall, down to the vaults beneath; and under Fig. $\frac{\text{LXV.}}{2}$ are ſketches of two of the other windows, on the Weſt ſide of the Hall, on a larger ſcale, for the ſake of ſhewing more nearly the form of their conſtruction.

Such was the ſtrange mixed ſtyle of architecture, with which ended the ancient mode of Reſidence in caſtles, properly ſo called.

It would far exceed the limits of this paper, to deſcribe particularly the ſtill more extenſive and noble piles of this age. As *Kenelworth Caſtle*, the greater part of which was built by John of Gaunt, excepting the old edifice called Cæſar's Tower (probably erected in the time of Henry the Firſt) and part of the walls; *Warwick Caſtle*, built by Thomas Beauchamp, Earl of Warwick, in the time of Richard the Second; and *Alnwick Caſtle*, in Northumberland, the moſt ſuperb of all, built chiefly by Henry de Percie, and his immediate ſucceſſor, in the reigns of Edward the Second and Third; but having, as at Kenelworth, a few ancient buildings, not only of the time of the Conqueſt but of Saxon times. And if it did not exceed the limits I have propoſed; yet it would be to little purpoſe, to inſert ſuch deſcriptions: for although theſe noble ſtructures are more magnificent, and nearer approaching to a reſemblance of Windſor itſelf; yet they have fewer characteriſtick and ſtriking marks of the *introduction* of the *Edwardian* ſtyle in building, than theſe ſmaller ſtructures of inferior dignity: and the old remains of ancient grandeur, are ſo overwhelmed with modern magnificence and elegance, as hardly to be diſcerned. Even at Kenelworth, the additions made by the magnificent Earl of Leiceſter, in the time of Elizabeth, prevent the perceiving clearly what the condition of the building was in the

time of Edward the Third: and at Warwick, the ſplendid reparations and embelliſhments of Sir Foulk Greville, in the time of James the Firſt, perplex the *painful Antiquary* exceedingly; whereas the two caſtles of Harewood and Spofford (which I have juſt deſcribed) manifeſtly remain, as to the diſpoſition of the apartments, nearly in the ſtate they originally were.

Nearest to theſe, in the exhibition of original antiquity of architecture, is *Naworth* caſtle, in Cumberland, which there is the greateſt reaſon to believe was built by Ranolph de Dacre, in the reign of King Edward the Third, and of which Mr. Pennant has given us a moſt curious account, publiſhed in Mr. Groſe's Antiquities. It has ſtill more of the aukward attempt of introducing convenience and magnificence; and ſtill leſs of the cautious proviſions for munition and defence, than thoſe I have referred to.

To theſe venerable piles ſucceeded the *Caſtellated Houſes*; Manſions adorned with turrets, and battlements; but utterly incapable of defence, except againſt a rude mob, armed with clubs and ſtaves, on whom the gates might be ſhut; yet ſtill manſions almoſt quite devoid of all real elegance, or comfortable convenience, and fitted only to entertain an *herd* of *retainers*, wallowing in licentiouſneſs. At the ſame time, however, they diſcover marks of œconomy and good management, which enabled their hoſpitable lords to ſupport ſuch rude revels, and to keep up their ſtate, even better than many of their more refined ſucceſſors.

Of theſe buildings, one of the moſt perfect and moſt curious, now remaining, is *Haddon-houſe*, in Derbyſhire, belonging to his Grace the Duke of Rutland: caſtellated and embattled, in all the apparent forms of regular defence; but yet

really without the leaſt means of reſiſtance, even in its original conſtruction.

It was formerly the ſeat of the Vernons; who, Camden ſays *, were not only an ancient, but a very famous family in thoſe parts; inſomuch that Sir George Vernon knight (living in Camden's time) for his magnificence, for his kind reception of all good men, and for his great hoſpitality, gained the name of *King of Peak*, among the vulgar. By his ſecond daughter *Dorothy*, married in the beginning of Queen Elizabeth's reign, to Sir John Manners, ſecond ſon of Thomas the firſt Earl of Rutland, the great inheritance of this family came into that of *Manners*; and, in 1641, was at laſt united with the Earldom.

The high turrets of this manſion ſtand proudly towering on a rock, in the midſt of thick woods, and in a moſt beautiful ſituation, looking down upon the river *Wye*, which winds along the valley, at a great depth beneath. It has undergone fewer alterations, and retains more curious veſtiges of the reſidence of an old Engliſh Baron, and exhibits more manifeſt indications of the ancient mode of life, than any building I ever ſaw.

At the firſt approach, you aſcend a ſteep hill, which an horſe can hardly climb, and which continues quite to the great arched gate-way that forms the entrance; this is directly under an high tower, and ſeems originally to have had double gates.

From hence you paſs into a large ſquare court, entirely ſurrounded by the apartments, and paved with flat ſtones; but you aſcend it, at the corner, by a flight of angular ſteps, juſt within the gate, in ſuch a manner, that it is impoſſible to have admittance otherwiſe than on foot; and no horſe or carriage could ever approach the door of the houſe.

* Camden, p. 494.

After croſſing this court, you come to a ſecond flight of ſteps; which lead up directly to the great porch, under a ſmall tower: on paſſing through which; you find yourſelf, behind the ſkreen of the great hall. A room, that moſt undoubtedly was originally conſidered as the only *publick dining room*, for the lord and his gueſts; and indeed, (after them), for the whole family: for, in tracing the ancient apartments, there appears manifeſtly to have been none beſides of ſufficient magnitude for either the one purpoſe or the other.

The proviſion made, in the adjoining offices, for the convenience, and attendance, of the ſeveral ſervants of the houſhold, is very curious.

On the left hand of the great door of entrance, directly behind the hall ſkreen, are four large door ways, with high pointed arches; extending, in a row, the whole breadth of the hall; and facing the upper end.

The firſt of theſe, ſtill retains its ancient door of ſtrong oak; with a little *wicket* in the middle, juſt big enough to put a trencher in or out; and was clearly the butler's ſtation: for the room within ſtill retains, a vaſt old cheſt of oak, with diviſions for bread; a large old cupboard, for cheeſe; and a number of ſhelves, for butter.

Beſides, out of this apartment (which is itſelf ſpacious, and ſeparate from all the reſt of the houſe), is a paſſage, down ſteps, to a large vaulted room, arched with ſtone, and ſupported by pillars, like the crypt of a church; which, though very light, and airy, was cool, and manifeſtly deſigned for the beer cellar; there being ſtill remains of a raiſed, low benching, of ſtonework all around, ſufficient to hold a prodigious number of caſks; and a neat ſtone drain, all along before it, underneath, to carry away any droppings.

Through

THROUGH this great arched room, is alſo another paſſage, to what was obviouſly the brew-houſe, and bake-houſe; where are remains of the places for vaſt coppers, coolers, and ovens.

NEAR adjoining are ſtore-rooms; for corn, and malt; and a communication, from thence, with the outſide of the building, for bringing in of ſtores. But, in all other reſpects, this whole ſuite of offices was quite unconnected with the other offices; and had no kind of communication, either with them, or with the reſt of the manſion, except by the door of entrance, near the hall, in which is the little wicket.

THE ſecond pointed arch, next to the buttery, and facing the hall in like manner, is the entrance of a long narrow paſſage, leading with a continued deſcent, to the great kitchen; and having, in the mid-way, an half-door, or *hatch*, with a broad ſhelf on the top of it, whereupon to place diſhes; to which, and no further, the ſervants in waiting were to have acceſs.

IN the kitchen, are ſtill remaining two vaſt fire places, with irons for a prodigious number of ſpits; ſtoves; great double ranges of dreſſers; large chopping blocks; and a maſſy wooden table, hollowed out into a ſort of baſons, by way of kneading troughs for paſtry. In the floor are ſeveral great iron rings, by which large ſtones were lifted up, that gave entrance to the drains. And adjoining to the kitchen, are numerous apartments, (far more than I have been able to ſpecify with ſufficient accuracy in the plan) by way of larders &c; all kept as diſtinctly annexed to this part of the offices, as thoſe belonging to the buttery were to it.

THE next, (being the third of the great pointed arches, behind the ſkreen, at the bottom of the hall), opens merely into one very ſmall, vaulted room, unconnected with any other; that

was

was clearly the wine cellar: which (according to the frugality and ideas of early times, when wine was considered merely as a cordial, and dram) needed to be but ſmall.

THE fourth great arch is at the bottom of a great ſteep ſtair-caſe, quite diſtinct from the grand ſtair-caſe of the houſe; and leading up to a prodigious variety of ſmall apartments; which, both from their number, and ſituation, ſeem to have been deſigned for the reception of gueſts, and numerous retainers: there being others, of a ſtill inferior ſort, in the reſt of the houſe, for ſervants; eſpecially in the range of building oppoſite to the great door of the hall.

SUCH was the uſe of theſe four great arches behind the hall ſkreen. And, if it may be allowed to indulge a little extent of imagination, we may with great propriety conceive, that they were the ſtations of the Butler, the Clerk of the kitchen, the Cellerer, and the Chamberlain or Steward of the houſhold, of this great family.

THE proviſion for the officers and attendants being ſo great, we ſhall yet find, here, as in all very ancient manſions, that the apartments of the Lord of the caſtle (or what we ſhould now call the ſtate apartments) were very few in number, and little adequate to the reſt, according to our modern and more refined ideas.

THE great hall of entrance, juſt deſcribed, was the only large apartment for dining. At the upper end remains the raiſed floor, where the table for the lord, and his principal gueſts, was placed: and along all one ſide of the hall, and alſo over the ſkreen at the lower end, is a gallery, ſupported by pillars; from whence (when the lord and his company had retired to the apartments above, and the inferior part of the family had ſupplied their places), the courtly gueſts, and their hoſ-

hoſpitable hoſts, occaſionally beheld the revels; and might ſurvey the jovial crew below; who, according to the old diſtich,

"Made it merry in the hall,
"When beards wagged all."

From this great hall, at the upper end, in the corner, on the left hand, are two paſſages: one opening upon the terraſſes in the garden, inviting the gueſts to refreſh themſelves; and the other leading to the grand ſtaircaſe, and the principal apartments above.

This ſtaircaſe is formed of large blocks of ſtone; which can hardly be ſaid to be either jointed, or joined; and from the top of it, on the right, you enter what we ſhould now call a drawing room, hung with arras, and having a large bow window as the only light to it, at one corner; and a little door, at another, behind the arras, leading into the gallery juſt mentioned, which goes round two ſides of the hall. This room, however, (whatever name we might now give it) was called the *dining room*, and probably had that appellation, becauſe the Lord of the Manſion did, even originally, on ſome particular ocaſions, *here* entertain a few of his Viſitors of high dignity and rank; and becauſe afterwards, in latter ages, it became more commonly appropriated to that purpoſe, when a greater diſtinction was ordinarily made between the gueſts.

On the left of the paſſage, at the head of the great ſtairs, you aſcend again by five or ſix enormous ſemicircular ſteps (framed of ſolid maſſes of timber, as ill joined as the ſtone ſteps) to a fine long gallery, 110 feet in length, and 17 in width; which is now all wainſcotted, in a curious manner, with fine oak, the freeze being adorned with *boars heads*, *thiſtles*, and *roſes*. This wainſcotting, though modern in compari-

ſon

ſon of the Antiquity of the houſe, is yet become, in theſe days, very ancient; and conveys an excellent idea of the magnificence of the intermediate ages. There is a great ſquare receſs, in the midſt of the gallery, of 15 feet by 12; beſides ſeveral great bow windows: and the whole puts one very much in mind of the galleries, in the old palaces in France, ſo often mentioned by Sully, and the French hiſtorians.

FROM this gallery, towards the further end, is a ſhort paſſage, with an aſcent of four or five aukward ſteps, leading to what might be called *my lord's parlour*; it having been obviouſly a ſort of private apartment, deſtined to his uſe; from whence is a paſſage, behind the arras, through large, ill-framed folding doors, to a flight of ſtone ſteps, that lead down to the chief terraſs in the garden. The freeze and cornice of this room are ſtately; but very rude; formed of plaiſter, and adorned with peacoks, and boars heads, alternately.

FROM this room you paſs forward into a ſecond; which ſeems, from its ornaments, and the whole diſpoſition of it, to have been originally a ſort of private dining room; or keeping room; but it was not large enough to entertain a number of gueſts. It may poſſibly, however, in latter ages, have been uſed as a bed chamber: and therefore I will not preſume to decide any thing poſitively with regard to it. The freeze of this, like the former, is of plaiſter, not deſerving the name of ſtucco; and is adorned with coats of arms, and with the two creſts, peacocks, and boars heads: and over the chimney, by way of ornament, is an enormous large baſs-relief, of the ſame clumſy compoſition, repreſenting Orpheus charming the beaſts.

THROUGH this room is one other, which ſeems to have been a bed chamber; out of which is a ſmall winding ſtaircaſe, in a turret, going up to the garrets, and down to the ground.

ALL

All these rooms, except the gallery, were hung with loose arras, a great part of which still remains: and the doors were concealed, every where, behind the hangings: so that the tapestry was to be lifted up, to pass in or out; only for convenience, there were great iron hooks (many of which are still in their places), by means whereof it might occasionally be held back. The doors being thus concealed, nothing can be conceived more ill fashioned than their workmanship: few of them fit at all close; and wooden bolts, rude bars, and iron hasps, are in general their best and only fastenings.

Besides the gallery, the dining room, and these three apartments, there were only *two* others; and those but small ones; which could be said to belong at all to the principal suite.

These two were entered, through a sort of closet, at the further corner of the dining room (or *drawing room*), and at the end of the furthermost of them was a flight of narrow, steep, stone steps, leading down into the great court, near a low arched vault that forms the entrance to the chapel.

One of these apartments, however, is very remarkable; having an odd cornice, with a deep quadruple freeze, three or four feet in depth, if not more, formed of plaister, and adorned with a running foliage of leaves and flowers, in four compartments, like bands, or fillets, one above another. The room is hung with arras, as the others are; but, from a quaint sort of neatness, appearing in the whole of it, more than in them, I am much inclined to call it *my lady's chamber*. There is, *behind the tapestry*, the door I mentioned, leading to the steep flight of narrow steps, which descend into the great court, not far from the arch belonging to the chapel, and which gave her an opportunity of going thither, rather a nearer way than the rest of the family, and without crossing so much of the great court.

ALL the reſt of this great pile of building (containing another large ſquare court, beſides that we have been ſpeaking of) is filled with ſmall, trifling apartments, not one of which deſerves deſcription; but which form a labyrinth, almoſt as inextricable as that of Crete; and which could be of no uſe, but to lodge a vaſt *hoſt* of dependants, retainers, and ſervants.

COME we now to the Chapel, which is not leſs curious than the reſt. Its entrance is from the firſt great court, under a low, ſharp-pointed arch, looking more like the entrance of a cellar than that of a place of worſhip, and leading to a ſort of anti-chapel, very low in height, and that has not a much better appearance. To this was no approach by any covered paſſage; nor was there any ſuch approach to any gallery in it; no not even for the lord or lady; but, according to the rough hardineſs of the times, and climate, they were all to trudge, in fair weather or foul, through the open court; only the lady had, as juſt deſcribed, a nearer way of going than the reſt.

THE chapel itſelf, has, at the entrance, two ſide iſles, divided from the body by pillars and pointed arches, like a church: and in one of them are many long oaken benches, for the domeſticks; the other ſide iſle being taken up, with the pulpit, the deſk, the ancient organ loft, and the ſtairs leading to them.

THE organ * is now removed; but the wainſcotting of the loft, all edged with burniſhed gold, like that of the pulpit, and deſk, and ſeats for the family, ſtill remain.

THESE ſeats for the family, conſiſted of two large high pews, on each ſide the body of the chapel, reaching from the middle nearly as far as the altar; and were large enough to hold many guests.

* I call it the organ; but moſt probably it was rather originally here, as at Knowle, what ſhould properly be called *a pair of Rigals, or Regals.*

THESE

In the great windows, over the altar, and on each ſide, are ſome good remains of painted glaſs. And in this chapel (which I never ſaw in any private chapel before) is an old ſtone *Font*, indicating the numerous tribe of dependants once here reſident; and inducing one to conclude, that the extraordinary privilege of having the ſolemn rite of baptiſm adminiſtered, was for ſpecial reaſons indulged, by the ordinary, in very early times, to this private chapel *.

There remains alſo a nich, and baſon for holy water, by the ſide of the altar.

I have already obſerved, that this great houſe contains two large courts. Both of them are embattled, and ſurrounded with many turrets, and projecting bows: and they have a communication with each other, by means of the paſſage behind the hall ſkreen. The ſecond court has alſo another great arched gateway, as well as the firſt; but not much leſs difficult of acceſs to any carriage or beaſt.

Having hitherto carefully forborn to refer to any plan, to avoid as much as poſſible all perplexity and interruption, in the deſcription, of this curious remain of antiquity; I ſhall now, in order to be better underſtood, ſubjoin the beſt I can deviſe, to illuſtrate what has been ſaid. It is not indeed quite ſo exact as I could wiſh, being drawn only from the eye, and in ſome degree from memory; but is particular enough, in all the moſt

* The rite of adminſtering baptiſm, was eſteemed ſo ſacred by the ancient Ritual, that it was, together with that of burial, the diſtinctive mark, in general, of a Church fully conſecrated: inſomuch that lord Coke informs us (2 Inſt. 363) that when the queſtion at law was, whether ſuch a ſacred building were a *church*, or a *chapel* belonging to the mother church; *the iſſue* to be tried was, merely whether it had a *font*, and burying place; for if it had the adminiſtration of ſacraments, and ſepulture, it was judged in law *a church*.

material parts, to convey a true idea of the whole design, and arrangement of this ancient structure. And although the measures of the several rooms are not perfectly true, yet they are near enough to the real proportions, in all the principal apartments, to answer to the appearance which they make. As to the others, (which, as I before observed, form a perfect labyrinth), they are by far too numerous, too perplexed, and too small, to afford an opportunity of making any exact plan, without such vast labour bestowed, as would be to little purpose; since, after all, no useful information could be derived from a more perfect knowledge of their aukward confused proportions and disposition. On this account therefore, I have moreover, in order to illustrate, with the less trouble, what has been said, in one and the same plan, in some parts, (which will be sufficiently distinguished), confined the representation to the apartments *on the ground*; and in others, to *those above*; knowing there can be no loss of information, in consequence of my so doing; for those left undescribed, either above or below, are such little nests of rooms, as not to be worth the least notice.

In Fig. LXVI (A) shews the place of the great arched gate way, under an high tower; forming the first entrance; on the brow of a steep hill.

(ss) the angular steps, at the corner; by which you ascend into the great court.

(a) the second flight of steps, and the porch of the house, under another tower.

(b) the great hall; having no rooms either above it, or underneath. The dotted line represents the situation of the gallery, and skreen: and at the lower end, are the four great pointed stone arches, marked (1), (2), (3), and (4).

N° (1). leads to the buttery (5), having a door with a small wicket window.

(6.) (6.) is the great cellar.

(7.) (7.) The offices for brewing and baking.

N° (2). leads to the great kitchen at (8).

(10. 10. 10. 10.) are offices belonging to it; but having more divisions than can be here represented.

N° (3). leads to the small insulated wine cellar.

All these Apartments are either upon the ground, or partly under it; and above them are the numerous small rooms for retainers, to which the staircase leads from the great arch at N° (4), and of which it would be almost impossible to give any plan.

At the other end of the great hall, near the corner, at (c), are the principal stairs, leading to the grand apartments; just by the entrance to which, is a passage leading streight forwards to the terrass (zz).

On ascending this staircase on the right hand, is the Dining room (d); (or, as we should now call it, the drawing room); having only one bow window in a corner.

On the left hand, is the Great Gallery (e).

(f) is the parlour: from whence is a short flight of steps, down to the terrass, at (p).

(g) is the second private apartment, which may have been used, in different ages, for various purposes.

And (h) was another chamber.

All these rooms are ascended to by the great stairs; but have no chambers over them, except mere garrets in the roof; nor any apartments, except vaults, under them, on account of the continual and quick rising of the hill, from (z. 1). to (z. 2).

(i) is a closet, out of the dining room.

And

AND (k) and (l) are what I call the Lady's apartments; from whence is the ſteep ſtair-caſe, at (q), near the arch leading to the chapel, at (n).

(m) ſhews the ſituation of the chapel.

AND (ooo) are a number of offices, and ſmall rooms; to which there are various diſtinct ſtair-caſes from the court.

(B). is the great arched gate way, belonging to the ſecond court.

FIG. LXVII. repreſents the door of the great porch, leading into the hall; with the two ſhields of arms over it, carved in ſtone. The one containing thoſe of Vernon (which are *fretty*), and the other thoſe of Fulco de Pembridge, Lord of Tong in Shropſhire, whoſe daughter and heireſs Iſabel married Sir Richard Vernon, and brought a great additional eſtate into the family: theſe properly are *Barry of ſix, Or and Azure.*

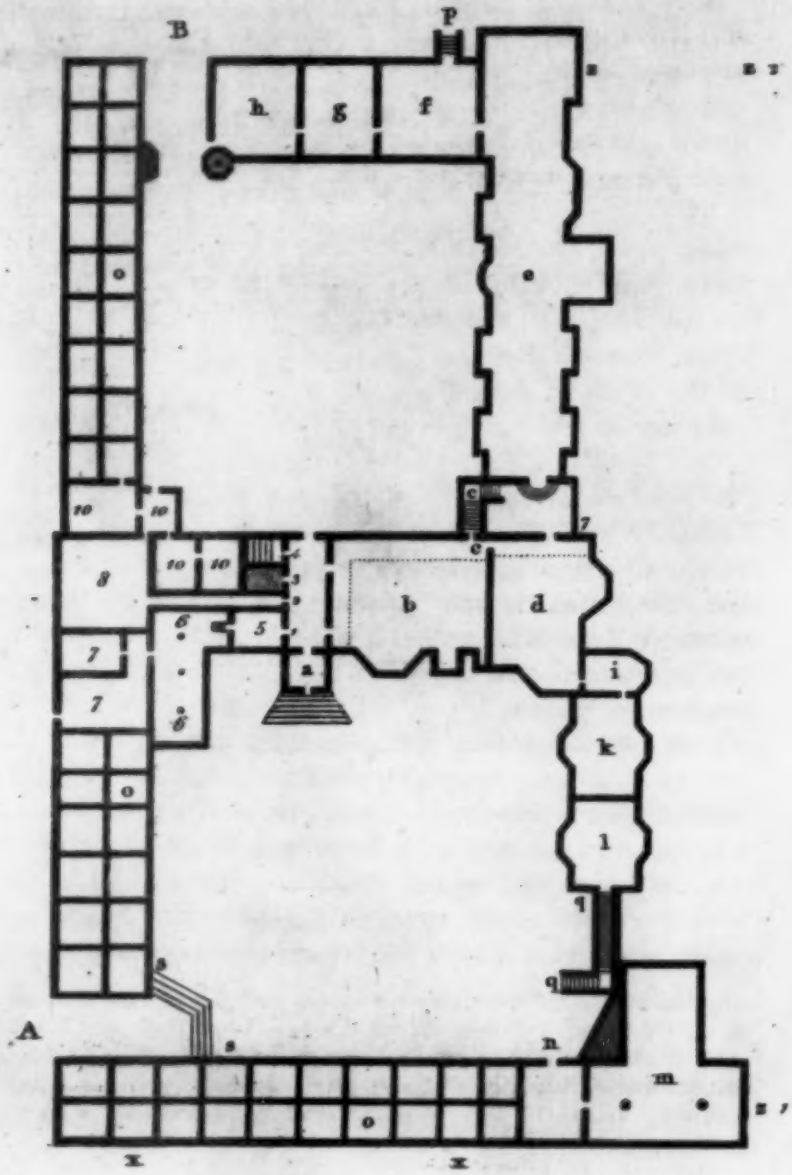
FIG. LXVIII. ſhews the deſign of the old wainſcotting of oak, in the great gallery. The arms and devices of which, prove that it was put up *after* the houſe came into the poſſeſſion of Sir John Manners; and before the title of Earl of Rutland deſcended to that branch of the family. The arms are repreſented fig. LXIX.

THE ancient garden of this great houſe is but ſmall; conſiſting entirely of terraſſes, placed one above another: each having a ſort of ſtone baluſtrade. At the end of one of theſe terraſſes is an arbour: upon another a ſort of ſmall bowling-green*: and from the lowermoſt, which runs along the ſide of the houſe, (XX) is a ſteep deſcent, of ſome hundred ſteps, down to the river. The higheſt terraſs runs from (z) exactly parallel with the loweſt.

SUCH

* There was another great bowling green, far above the houſe, at a diſtance in the park; and a third ſtill more modern one, has been formed, higher up the hill, ſupported by walls, built round it, like a ſort of hanging garden, and having a large

F. LXVI



Plan of Haddon House in Derbyshire.

Nº fiore 1

SUCH was Haddon houſe, with its environs. And much it is to be wiſhed, by every lover of antiquities, that this princely habitation may never come ſo far into favor, as to be modernized: leaſt the traces of ancient times and manners, which are now ſo rarely preſerved in this country, any where, ſhould be utterly loſt alſo here.

NOTHING can convey a more compleat idea of ancient modes of living, than is to be obtained on this ſpot. Many great dwellings, which formerly helped to preſerve the ſame ideas, are now quite raſed, and gone: and others are only heaps of ruins; ſo far maimed, that it requires much attention to make out or comprehend, what they once in any degree were, or to underſtand any thing of their original plan.

YET, when once illuſtrated by ſuch a perfect remain as Haddon, even ſuch old ruins as thoſe of the biſhop of Lincoln's palace, at Lincoln, convey to us ideas of exactly the ſame kind of ſplendid hoſpitality, ſupported by, and conducted with the ſame ſort of oeconomy. So alſo did the remains of Ely Houſe, in Holbourn, when ſtanding; although ſuch alterations had been made *there*, in latter times, as might prevent an unexperienced obſerver from diſcovering the veſtiges of the ancient ſplendid ſtyle of living in ſuch palaces.

THIS odd mode of building, conſiſting of a vaſt aukward aſſemblage of a prodigious number of ſmall apartments, with *few* good ones for comfort and convenience; but with great proviſion for a noble diſplay of hoſpitality; had for one of the laſt ſpecimens of it (though in a much improved ſtyle) the *old part* of the palace

large ſummer-houſe adjoining: but neither of theſe are worth giving any particular account of. The proſpect from thence is indeed fine: but they have nothing to recommend them as objects of attention to the curious, in any other reſpect. The great park that belonged to this houſe has been deſtroyed, and the land has been ploughed up, within theſe twelve years.

at

at Knowle * in Kent; at present the seat of his grace the Duke of Dorset; but originally built by Thomas Bourchier, Archbishop of Canterbury, about the time of Edward the Fourth; and improved by the Archbishops Morton, and Warham, in the reigns of Henry the Seventh and Eighth.

AFTER it soon followed the magnificent regular quadrangular houses: such as that at Cowdry in Sussex; one of the most perfect of the kind, even exclusive of later improvements; and as that at Penshurst, in Kent, the ancient seat of the Sidneys; built in a ruder style, and more like the original kind of castellated houses, from whence its plan was derived.

IN the midst of the old hospitable hall of this house, at Penshurst, still remains the great fire hearth; with the old frame of iron, big enough, and strong enough, to hold vast piles of wood; and almost sufficient, if need should be, to sustain the trunk of a tree. Its form is sketched fig. LXX.

AT the upper end of the hall is a large table, on a raised pavement: and there is another still longer on one side.

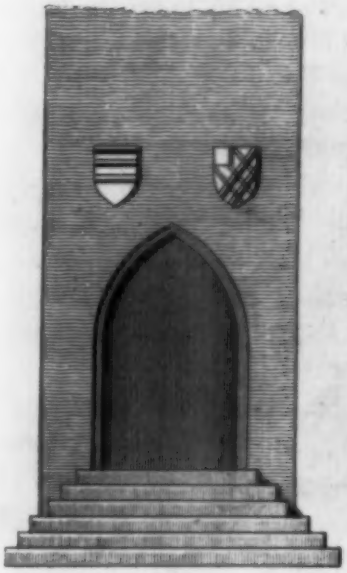
THE steps, in some parts of this house, are vast blocks of solid oak: and the floor of the first state room, and of many others, are formed of huge thick planks of oak; that seem rather to have been hewn out with an hatchet, or adze, than to have been either sawn, or planed.

THESE kind of structures, were followed by the stately buildings of queen Elizabeth's reign; whereof we have fine specimens in Burleigh House, in Lincolnshire; and in Hardwick House, belonging to his grace the duke of Devonshire, in Derbyshire: the latter of which, containing the state apartments

* The improvements and additions made by Thomas Sackville, Earl of Dorset, in the time of James the First, are carefully to be distinguished from the old building.

fitted

F. LXVII



F. LXVIII

F. LXIX

F. LXX

In Haddon House &c.

fitted up by the Counteſs of Shrewſbury, for the reception of the Queen of Scots, and on account of the deſigned viſit of Queen Elizabeth, remains in its primitive ſtate, with the original furniture, to this day; and deſerves to have a large and accurate account preſerved of it, as a means of conveying to the curious, in times to come, an exact idea of the ancient ſtyle of living, and of the manners of that peculiar age. But this paper (deſigned to inveſtigate matters of ſtill higher antiquity) has already ſwelled to too large a bulk, to permit me to add any detail of that kind.

HAVING, therefore, *now* brought down the Hiſtory of the Progreſs of Architecture (as far as it relates to caſtles, and noble buildings, the ſeats of reſidence of the ancient Barons of England) to a period with which we may more eaſily be made acquainted, I ſhall conclude with juſt making a ſhort recapitulation of the whole gradual proceſs.

AND 1ſt, we find the idea of grandeur, united with defence, *ſupported* even in the very ſmall, inconvenient, ſtrong *Anglo Saxon* Tower; ſcarce deſerving any better name than that of a *Magnificent Den*; and juſt one remove beyond the Northern Dun: and it is curious to mark, how a ſenſe of innate dignity, and the ebullitions of vanity, have attended the human mind, even in its loweſt ſtate of debaſement; and whilſt confined by every diſadvantage ariſing from the want of art and ſcience.

2dly, SUCCEED, on the firſt dawn of civilization, the improved, large, and convenient caſtles of Alfred.

3dly, To theſe follow the round Norman keeps, erected on high artificial mounts; and being indeed (in conſequence of deeply rivited prejudices) a ſort of *retrogreſſion* of military architecture, and a return to northern ideas, rather than an improvement. But

4thly, SOON afterwards were introduced the beautiful and noble Towers of Gundulph: the fact ſeeming to be in this, as it has

 often

often been in many other inſtances, that the conquerors were, in point of the improvement of arts and ſcience, ſubdued by the conquered.

5thly, AFTER theſe ſucceed the *mixed* kind of Buildings; when the architects wantonly availed themſelves of all the foregoing inventions, without much taſte or diſcretion, and juſt as they pleaſed, or as time and opportunity permitted.

6thly, AT length came the grand and noble piles of Edward the Firſt; manifeſtly derived from the opportunity of ſeeing, during the Croiſades, the various refinements and improvements in foreign countries: when at length the idea of the Caſtle was nearly ſwallowed up in that of the Palace.

7thly, EDWARD III. compleated the idea of the Palace; and that of the mere Caſtle began to be loſt.

8thly, SOON, therefore, ſucceeded the ſpacious hoſpitable Manſion, embattled only for ornament; and containing vaſt combinations of ill-matched rooms, put together as if they had been added at various times, and by chance. And then at laſt,

9thly, FOLLOWED the well adorned Regular Palace.

THESE *Nine* ſtages ſeem fairly to comprehend *all* the regular ſucceſſive alterations, from rude barbarity to civilization. And of every one of them we have ſpecimens, that have ſtood, and (were it not for the efforts of illiberal and wanton miſchief) are likely to ſtand, in this country, in ſome degree like the pyramids in Egypt, as laſting monuments of the earlieſt ages: but with the inattention and common prejudice of *natives*, we are too apt to think there is nothing worth regarding, or preſerving in the ſpot where we dwell.

I SHOULD now cloſe this Paper; but before I do ſo, I think myſelf under an obligation to attend to a reflection or two, that may occur to every judicious inveſtigator of this ſubject. The firſt of theſe is, that the invention of cannon and fire arms was one great means of producing the neglect and alteration of the ancient

ancient mode of fortifying: and the next is, that even during the period in which the more ancient caſtles continued in uſe, there were alſo certain palaces of reſidence beſides.

As to the firſt of theſe remarks, it may be ſaid, that whatever the cauſe of the alteration might be, the effect was the ſame; and the inveſtigation of this further cauſe, if purſued, would only ſhew, ſtill more clearly, in what manner the various changes came to paſs.

And with regard to the ſecond remark, it deſerves to be noticed, that although there was indeed occaſionally a reſidence alſo in palaces, and unfortified houſes; yet it appears, from various paſſages in hiſtory (too numerous to cite on this occaſion) that there was, moreover, as frequently, in the ſame ages, an occaſional reſidence in theſe very caſtles.

The Reſidence of *Gregory the Great*, in the caſtle of Dunadeer, in Scotland *.

The Reſidence of King *Edgar*, at Corfe Caſtle, in Dorſetſhire: the Reſidence of Queen *Elfrida* and her ſon *Egelred*, afterwards in the ſame caſtle †.

The birth of Edward the Second, in the caſtle of Caernarvon (where the very room is ſtill ſhewn in which he was born ‡).

The birth of Henry the Fifth, in the caſtle of Monmouth, when his father was duke of Hereford, and reſided there (at which place his cradle is ſtill preſerved).

The birth of Henry the the Seventh in the caſtle of Pembroke §.

The entertainment of Richard the Second, with all due marks of Royalty, in the caſtle of Rudland; and in *the Keep* of

* Boetius, lib. X. p. 213.

† Holinſhed, vol. I. part II. p. 162.

‡ Holinſhed, vol. III. fol. 282.

§ Stow, p. 471.

the castle of Flint, just before his surrendering himself to Henry the Fourth, as related by Froissart, Holinshed, and Stow *; concerning which Froissart expressly says, that King Richard was in *the dungeon*, or Keep, when the Earl of Derby sent the first message to him; and gives a most curious account of the ceremony of sending *two Knights* to open the outward gate, to admit the Earl; and adds how secure Richard was against all attempts before he had consented to do so.

AND the abode of Henry the Fourth, in the castle of Pontefract; at the time Archbishop Scroop was taken, condemned, and beheaded †.

ALL these instances may be alledged, amongst many others, as proofs of this fact.

THE curious account also, given by Mr. Pennant, of the seat of *Owen Glendur* ‡, in Wales; who was a Chieftain of great power, in the time of Henry the Fourth, deserves to be mentioned on this occasion.

AND it may be added, that the residence of the good and venerable Archbishop Usher, even so late as the time of Charles I. in *Torfeckan* Castle, in Ireland, (whereof a curious plan is given in the Louthiana §); and the numerous small castles remaining at *Carlingford*, and *Dundalk* ‖, in the same Kingdom, are remarkable instances of the continuance of the custom of dwelling in strong fortresses, kept up much longer in

* Holinshed, vol. III. fol. 500. Froissart, part II. chap. 241—Stow, 322. See also a very curious account of this matter in Pennant's Tour in Wales, p. 46.

† According to the account given us of this transaction in Drake's Antiquities of York.

‡ Pennant's Tour in Wales, p. 305.

§ Part II. plate 20.

‖ The Louthiana, part II. p. 6.

that

that country than in England, in conſequence of its continuing much longer in an uncivilized ſtate *.

WHAT the ſtyle of building was, in the Palaces in uſe, in the times coeval with the Caſtles we have been deſcribing, appears from the remains of thoſe at Weſtminſter, and at Eltham.

IT is a fact little adverted to, that the greater part of the Royal apartments at Weſtminſter, and indeed of the whole Palace, is ſtill ſtanding; and that the Great hall was the place where the Kings of England frequently dined, on all publick occaſions, as well as on that of their coronation; and was conſidered merely as the *common hall* of the Palace, till the long continuance of the courts of *Juſtice* there affixed a more ſacred idea to the place; although *they* at firſt ſat in that room, merely as following the king's Perſon; the judges of the courts being conſidered as a part of his uſual attendants †.

THE

* There is ſome reaſon to conclude, that in order to render the dwelling in the Round Norman Keeps more convenient; when their dimenſions were made very large (as at York, Lincoln, and Tunbridge) that there was ſubſtituted, in lieu of the mere *open* well, in the centre, a ſort of ſmall *open Court*, with walls and windows all round: and this may be concluded the rather, becauſe, at York, the mouth of the well, for water, is not in the middle of the area, ſo as to have been directly in the centre of the well, or area, for air and light, but on one ſide, as if it were originally in ſome one of the ſmall apartments into which the lower floor might be divided: and the appearance of the remains of the mouth of that at Tickhill is in the ſame ſituation.

† It appears evidently, even from the words of Magna Charta, 9 H. III. c. 11. that the Court of Common Pleas was by no means *then* firſt eſtabliſhed; but that it only was uſed, before that time, to follow the King's court, where-ever he was reſident, as a part of his train.

See

THE great hall, at Eltham, probably built by Edward II, was alſo the common dining-hall of that palace; and is, in point of magnificence and unpoliſhed grandeur, but little inferior to that at Weſtminſter. More than one parliament was held here in the reign of Edward the Third; and in this palace that monarch alſo gave a princely reception to John king of France, who had been his priſoner. Here alſo the Lords and Commons attended him with a petition, to create Richard his grandſon Prince of Wales, after the death of his father *.

THE ſeveral Kings, Richard the Second, Henry the Fourth, Henry the Sixth, and Henry the Seventh, reſided at this palace very much. And it appears (from a record extant in the Office of Arms) that even the laſt of them moſt commonly dined himſelf in the great hall, where his officers alſo had their reſpective tables †; from whence it may fairly be inferred, that his predeceſſors did the ſame.

I CANNOT, therefore, conclude this paper, without adding a ſhort deſcription of this Room of Royal entertainment, for the ſake of connecting the idea of the magnificence diſplayed in early times, in the more peaceable habitations of our Monarchs, with the idea of that diſplayed in their more important fortreſſes and ſtrong holds: and for the ſake alſo of explaining one

See alſo the preface to Lord Coke's 8th Report; and alſo 8th Report, p. 145.

A very curious account of the manner in which the reſpective diſtinctions between the courts of King's Bench and Common Pleas took place; and in which their reſpective juriſdictions became eſtabliſhed; together with a fair deduction of the obvious means whereby legal buſineſs was gradually drawn from the County courts, and transferred to theſe high courts, *reſiding* near the King's perſon, may be ſeen in Lord Chief Juſtice Hale's Hiſtory of the Common Law, p. 140. 142. 150. 152. 159.

* Haſted's Hiſtory of Kent, vol. I. p. 51. Selden on Parliaments, p. 23. Cott. Rec. p. 123. and Rym. Foed. vol. IV. p. 422. 423.

† See further Mr. Haſted's Hiſtory of Kent, vol. I. p. 51. (where many curious facts relating to this palace are collected), and the paſſages there referred to, in Kilburne, Philipott, &c. &c.

remarkable

remarkable appearance; namely, that of a *ſmall window*, at the upper end, originally looking out of ſome principal apartment into this hall; a window ſimilar to which (in imitation of theſe Royal halls) exiſted in almoſt all the more private *Noble* ones, for ſome centuries. And I the rather wiſh to draw the attention of the curious to this *window*, becauſe its ſituation tends to illuſtrate a curious piece of hiſtory, adopted by our great Poet Shakeſpear, and but little underſtood.

THIS Royal Hall at Eltham, is now vulgarly called King John's Barn, having been long appropriated to the ſervice of huſbandry. Its windows are light and beautiful; its roof moſt elegantly wrought; and it was formerly highly adorned; though many of its ornaments are now broken and deſtroyed. The ſkreen, at the lower end, running before the offices, was rich; with a gallery over it for muſick. The two great bow-windows, on each ſide of the upper end, in which were placed the ſide-boards, are ornamented with moſt beautiful tracery, and are moſt magnificent; and all the windows were obviouſly placed, with deſign, in ſuch a manner, as to afford an opportunity of hanging arras under them.

THE whole room is 101 feet in length; 36 in breadth; and has 10 windows on each ſide; beſides the bows, which are near 14 feet in width, and near 10 in depth. From the ſides of theſe bows were the doors into the ſtate apartments of the palace *.

FIG. LXXI. is a view of the outſide of this hall; ſhewing the window of one of the great bows, reſtored in part to its original appearance; and alſo the great door of entrance.

FIG. LXXII. is a view of the inſide; repreſenting the lower end; the ſkreen as far as its ornaments can be aſcertained; and the two other doors behind it, leading formerly to the buttery

* There is an exceeding curious plan of ſome remains of the offices of this palace, as they appeared in 1509, in Mr. Haſted's Hiſtory of Kent.

and kitchen. Many persons now living remember this skreen entire; with the gallery over it for musick, adorned with a great profusion of ornaments; but these are all now gone, and have been destroyed within these few years, as well as the fine inverted Gothic pinnacles, that hung down from many parts of the roof, and enriched it greatly.

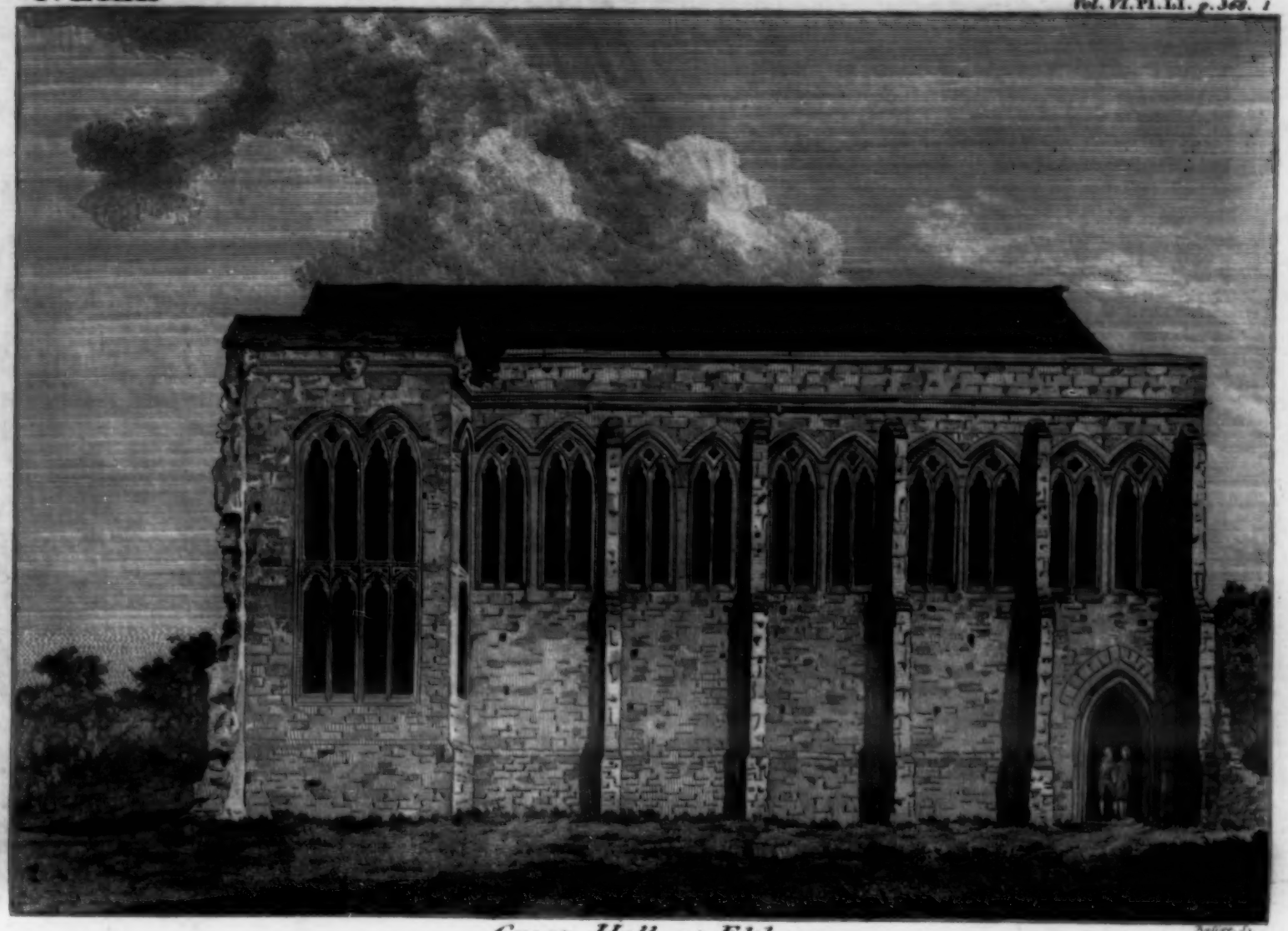
Fig. LXXIII. is an inside view of the remaining part at the upper end: shewing the place of one of the side-boards, in one of the bow-windows; where also was a door communicating with the inside of the palace: and shewing moreover the manner in which the side windows were placed, so as to allow space for the arras hangings occasionally put up.

And in this part is most observable the *small window*, now bricked up, at a considerable height from the floor, for the sake of which I have given this representation; and which (as appears upon accurate inspection) could have no opening outwards to the air, when the palace was standing, but must have been made merely to give a view into the hall, from some one of the Royal apartments above: a circumstance that seems very odd at first sight; but is perfectly consistent with what we find, upon examination, to have been a rule adhered to in the construction of almost all the ancient buildings of this kind; where vast hospitality was intended to be kept up, united with great dignity and magnificence.

In Ely House, in Holbourn, just before its being pulled down, it was discovered, that behind the wainscot, and the hangings of the great drawing-room (the same room identically that had always been a principal apartment of the house), there was a large recess, like a bow-window, neatly wainscotted with oak, which led merely to a little window, just of the same sort as that here described, looking into the

F. LXXI

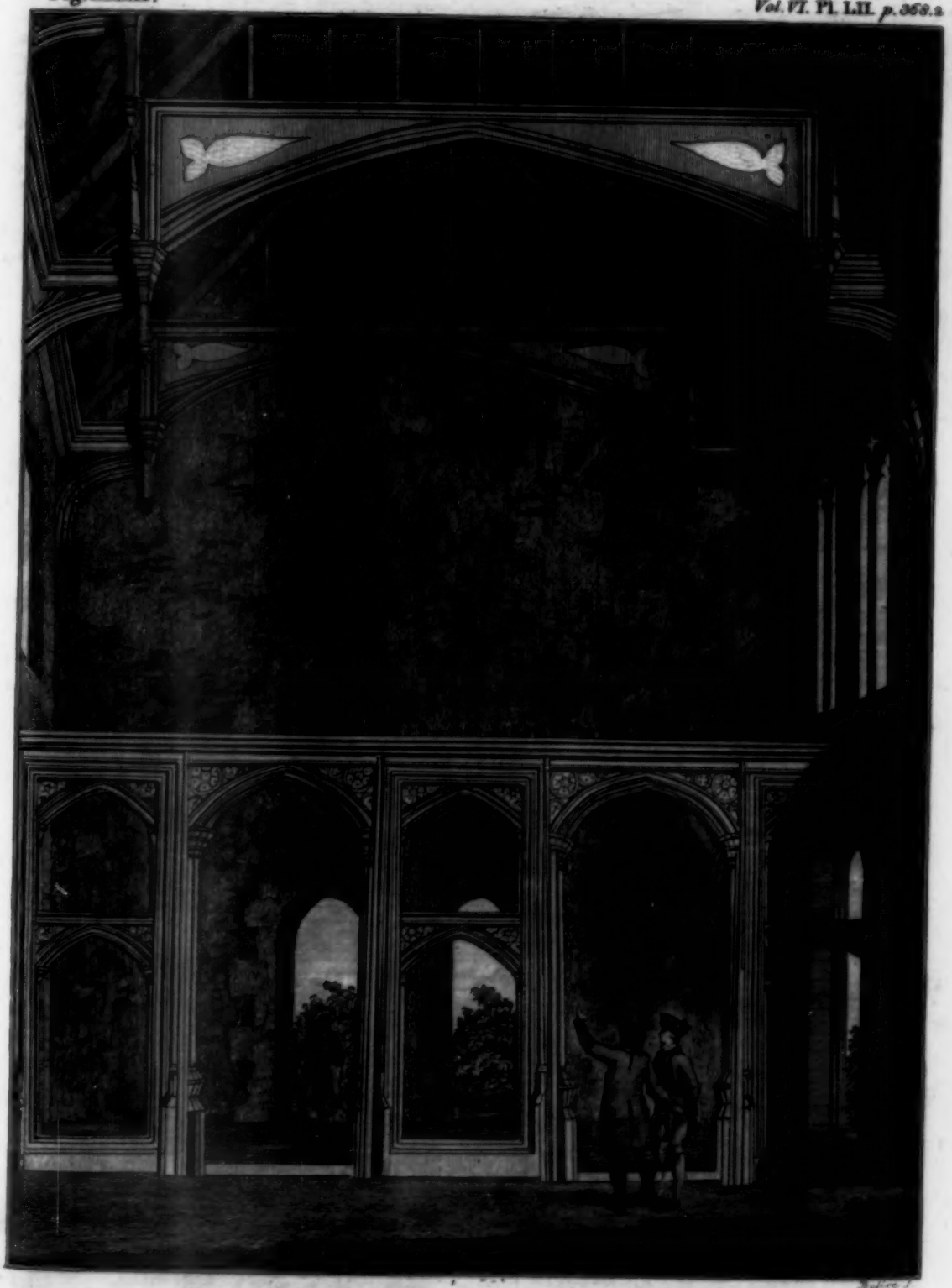
Vol. VI. Pl. LI. p. 368. 1



Great Hall at Eltham.

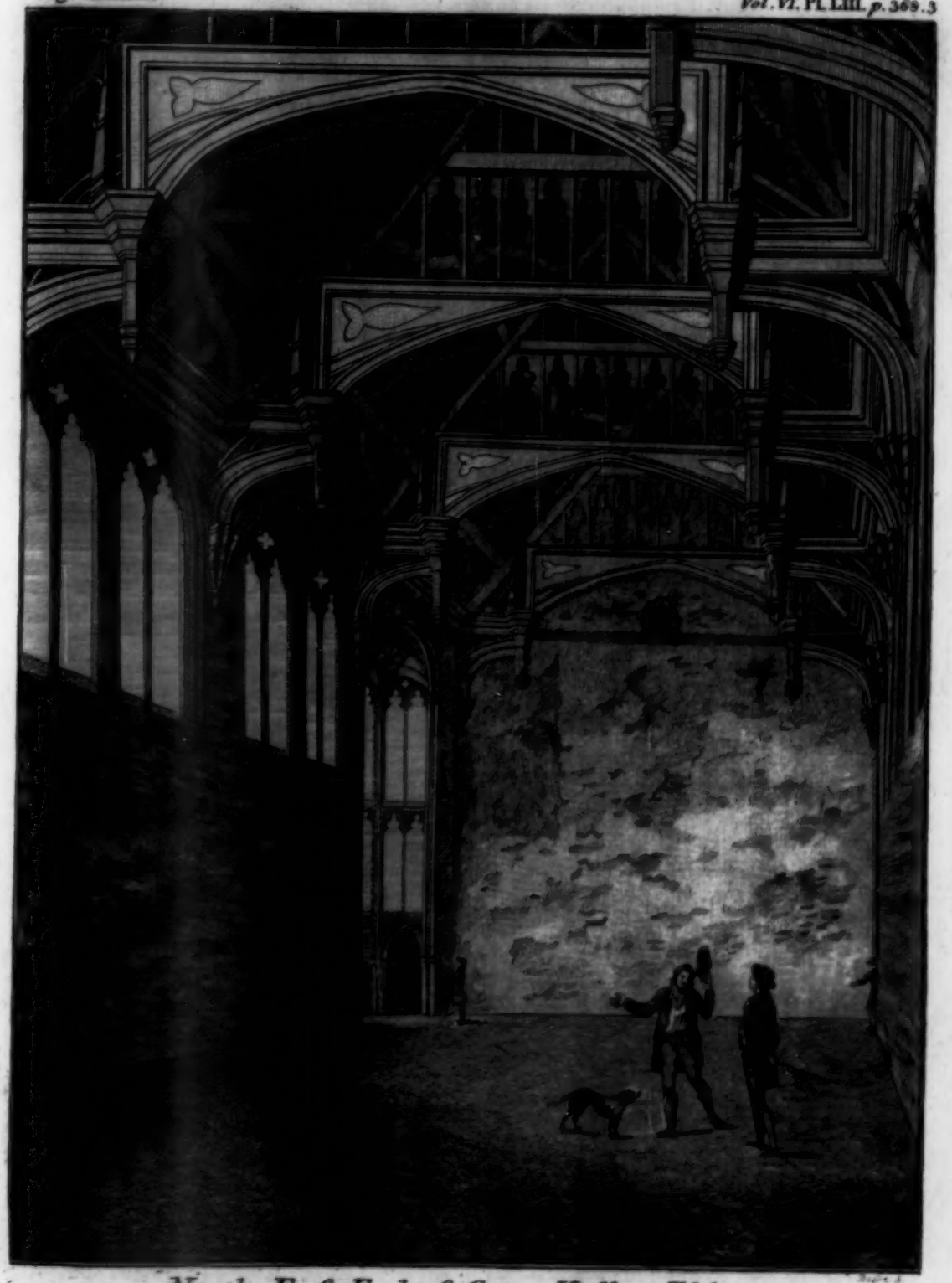
Sapiro S.

Fig. LXXII.



South West End of Great Hall at Eltham.

Fig. LXXIII.



North East End of Great Hall at Eltham.

great hall, directly over the table at the upper end. It had long been ſtopped up; and the receſs itſelf was at laſt quite hidden behind the wainſcot of the room, and entirely concealed, when Biſhop Gooch fitted it up for the laſt time.

At Penſhurſt, in Kent, again, although the window there is now concealed, yet it is obvious there was originally juſt ſuch another in the very ſame ſituation, looking into the great hall, from the great room above, in that houſe.

An accurate obſerver will alſo perceive, that the ſame was formerly the caſe at Cowdry; and moſt probably was ſo at Audley End, before the modern great ſtair-caſe was built at that end of the hall. Many more might be named, and will occur to every perſon who ſurveys, with attention and curioſity, the venerable ſeats of ancient hoſpitality.

These windows we may therefore be aſſured had their *peculiar uſe*; and that uſe ſeems to have been, to give a conſtant view, from one of the ſtate apartments above, into the great hall; both whilſt the inferior part of the gueſts were aſſembling, before the lord of the manſion and perſons of dignity went down to the common repaſt; and at other times occaſionally, when there was any concourſe of people in that apartment.

Even ſo late as the year 1669, when Anthony Wood went to Lambeth, to be introduced to Archbiſhop Sheldon, we find the Archbiſhop (occaſionally at leaſt) dining in the great Common hall.

Wood, with his uſual minuteneſs, tells us, that he was firſt carried into the gallery, where the company for a while entertained themſelves, till the Archbiſhop came from the Council table; and then they all went down with him into the common hall, where were divers Biſhops and perſons of quality;

and, he adds, there was an *high table* went acrofs the upper end of the hall; and tables on each fide, as in College halls *.

WE find, however, that in 1641, the cuftom of great perfonages dining *conftantly* in the common hall (as Henry VII. certainly did at Eltham) was fomewhat difufed: for in a very curious Memoir †, giving an account of the manner in which the Earl of Worcefter lived at Ragland Caftle, before the Civil wars, we are informed; that at Eleven o'clock the caftle gates were fhut, and the tables laid; *two* in the dining-room, and *three* in the hall. At the firft table fat the noble family, and fuch of the nobility as came there. At the fecond table, in the dining-room, or great chamber, fate knights. At the firft table, in the hall, fat gentlemen, under the degree of knights. And at the fecond table, gentlemen waiters and pages. Particular care was taken to place the guefts according to their rank. In the middle of each table there ftood a great falt-feller; and it was a mark of diftinction whether a perfon fat above or below the falt ‡.

BUT however the mode of the Lord of the manfion himfelf dining in the great hall might be altered, as luxury and refinement were introduced; yet the continued ufe of that hofpitable apartment, for the reception of numbers of his attendants, and the near adjoining fituation of the great chamber, ftill preferve traces of original manners. And the curious Scene, introduced by Shakefpear, in his Life of Henry the

* Lives of Leland, Hearne, and Wood, p. 222.

† Publifhed in the Antiquarian Repertory, Vol. III. p. 150.

‡ How far thefe ideas were carried, even into private life, appears from a claufe in the Will of the famous *Bernard Gilpin*; for there we find that good man giving to his fucceffor in the rectory of *Houghton*, in the time of Queen Elizabeth—*in the parlour, one long table upon a joined frame, with the form; likewife in the hall, three tables ftanding faft*, at which he ufed to entertain his parifh.——See Gilpin's Life of Gilpin, p. 231.

Eighth,

Eighth, may be explained and illuſtrated, by the remains of the window in the hall at Eltham; by the remains of the ſimilar window, with its cloſet, viſible, as I have mentioned, within a very few years, in the hall at Ely Houſe; and by theſe anecdotes even of later times.

SHAKESPEAR (who we may be aſſured would not deſcribe a ſcene incompatible with the cuſtoms of an age ſo near that in which he himſelf lived) introduces Dr. Butts, as bringing the King to a certain window, to ſee the diſhonour done to that good man, Archbiſhop Cranmer, by the ſpite and malice of his adverſaries: and yet it appears, from Cranmer's diſcourſe with the door-keeper, that he was *within* the palace; and the ſame may be inferred from what Butts ſays to Henry: for when, after having told the King, *that he would ſhew his Grace the ſtrangeſt ſight*; Henry had ſaid, *Body o'me, where is it?* Butts inſtantly replied, bluntly, THERE, *My Lord: The high promotion of his grace of Canterbury, who holds his ſtate at door, 'mongſt purſuivants, pages, and foot-boys.* And the King, in concluſion, ſays, *Draw the curtain cloſe; we ſhall hear more of this anon* *.

Now it appears very odd to us, in theſe more refined and modern times, what window it could be, to which Dr. Butts could poſſibly bring Henry 8th, to ſee what was paſſing in the Hall, or any where *within* the palace; eſpecially as that Monarch was one, who moſt undoubtedly neither loved trouble, nor could bear impertinence, or want of due reſpect.

FROM what has been ſaid, however, we may fairly conclude how the whole matter was: and that Butts, who was as much of a Courtier as any attendant upon the king's perſon, knew what he was about, and did not preſume to lead the king *out* of the royal apartments; nor trouble him to ſtep to any other

* Shakeſpear's Henry VIII. Act V. Scene II.

window, than that which was considered as properly belonging to his *Grace*, and reserved for his use, on all particular occasions; and which had generally a *curtain* drawn before it; namely the closet window, (similar to this at Eltham) looking from one of his own state-rooms into the great hall.

I have now finished these Enquiries: and I wish I may be as fully understood by others, as I think I apprehend the result of them in my own mind. But still I am sensible, much remains to be done, for the further, more accurate, illustration of the subject. The pains I have taken, and the labour I have undergone (even in these slight surveys), convinces me how difficult it is to obtain *accurate* observations; and makes me the less wonder, at the imperfect and short accounts, left us by Leland, and Camden, with regard to these curious buildings; and the less ready to complain of the want of information from those curious antiquaries: the defect of which has so long occasioned great misapprehensions with regard to the nature of such structures; although their remains are still so very capable of flinging light on history, and of explaining ancient usages and manners.

I was not sufficiently acquainted, even after my most diligent enquiries, at the expence of much time and cost, either with Canterbury castle, or with that at Tunbridge (notwithstanding my utmost attention) till my friends had assisted me, a second time, with workmen and ladders, to survey the former; nor till my worthy friend, Mr. Hooker, the respectable proprietor of Tunbridge castle, a man of great ingenuity, had revised, and corrected, in consequence of his intimate acquaintance with the place, both my drawings and notes, with regard to the latter.

It is no wonder, therefore, if former antiquaries, who neither had any such advantages, nor had bestowed either such cost

or time; nor were aware of the importance and curioſity of the ſubject; ſhould be miſtaken, and give ſlight and imperfect accounts; accounts which it is high time to correct, and ſet right; and with regard to which, we muſt (in conſequence of the preſent decaying ſtate of theſe ſtructures) receive further information *now*; or elſe looſe the opportunity of it for ever.

I HAVE only to add; that, upon the whole, the Anglo-Saxon, Daniſh, and firſt Norman, ſtructures, appear to me to have had what may without impropriety be called a ſort of *Celtic original*: and that the firſt plan of them ſeems to have been brought from *Media*, and the Eaſt, through the northern parts of Europe, in very early ages of the world: whilſt the rich buildings of Alfred, and of Gundulph, ſeem to have had a ſort of *Roman original*; and to have had their plans imported, through the Mediterranean ſea, by thoſe who viſited Rome, or engaged in Croiſades. An idea ſtrongly confirmed, by the reſemblance of the caſtle at Lanceſton in Cornwall, to the Capital of Media; and by the reſemblance of the caſtle at Rocheſter, to the tower of Antonia at Jeruſalem, as deſcribed by Joſephus *: which ſtood at the ſouth eaſt corner of the great area of the fortreſs called the citadel; was 70 cubits (or 112 feet) in height; and was firſt built by Hyrcanus, who *dwelt* in it, as did Ariſtobulus after him; was rebuilt by Herod; and was not only a *palace*, but a *priſon* alſo, wherein St. Paul was confined: a circumſtance which I endeavoured to illuſtrate in my former paper. And I cannot but add here, that it is a curious fact, mentioned by Joſephus, that there was a *covered way* manifeſtly high above the ground, that led

* Joſephus's Antiquities. B. xviii. c. 4. § 3. B. xiii. c. 11. § 2. B. xv. c. 8. § 5. c. 11. § 4. War, B. i. c. 3. § 4. c. 5. § 4. c. 21. § 1. B. ii. c. 15. § 6. c. 16. § 5. B. v. c. 4. § 2. c. 5. § 8.

from

from the tower of Antonia to the temple; and that when this covered way was actually in the hands of assailants, and was cut down, and the other parts of the fortress were also in the hands of an enemy, this tower was still defended by those who had possession of it, till at last they were all taken and slain *.

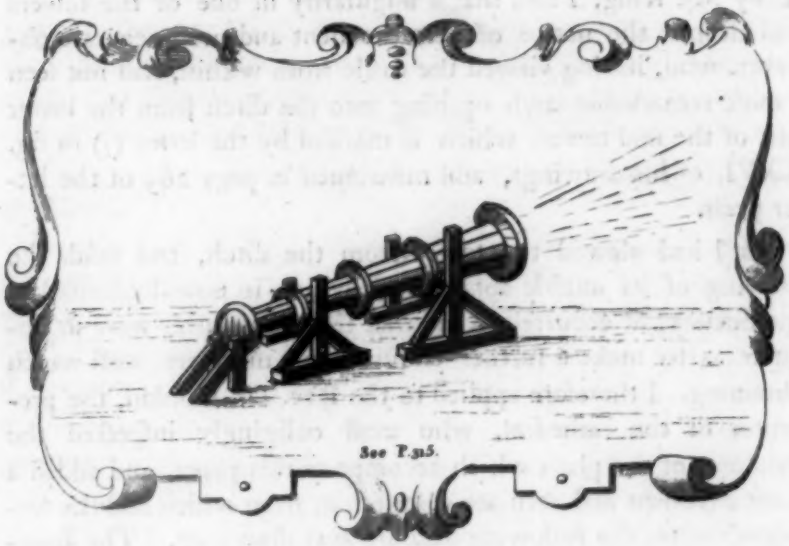
HAVING thus, as far as was in my power, endeavoured to do justice to the genius and abilities of our fore-fathers, exerted amidst the disadvantages and difficulties under which they laboured; and having endeavoured to trace, in some few respects, the progress of arts, and of science; I have only now to wish, that others may, with still more success, pursue this, and every various branch of enquiry, till a due and proper veneration be fully secured for whatever was *laudable* amongst our ancestors; and till the utmost possible exertions be kindled, amongst us, to avail ourselves of superior advantages; and to cause the increase and progress of whatever is good in the world, to be more rapid, and continually advancing; instead of declining. I am, Sir, with much respect, Yours, &c.

EDWARD KING.

* B. II. c. 17. § 7.

POSTSCRIPT.

I MOST earneſtly wiſh ſome curious perſon, who has leiſure and opportunity, would undertake to examine, more minutely, the remains of *Britiſh* caſtles in Wales; and of ancient *Scottiſh* caſtles, in the north; which, when compared with the curious accounts we have of Pictiſh and Scottiſh Duns, would nearly compleat the chain of hiſtory relating to the riſe and progreſs of fortified ſtructures in this Iſland: and mark the way for further and ſtill more curious inveſtigations.



XXVIII. *Addi-*

XXVIII. *Additions to Mr.* King's *account of* Lincoln *Caſtle. By Sir* Henry Charles Englefield, *Bart.*

Read May 16, 1782.

IN the account of Lincoln Caſtle, lately read to the Society by Mr. King, I find that a ſingularity in one of the towers had eſcaped the notice of that excellent and moſt accurate obſerver, who, having viewed the caſtle from within, had not ſeen a moſt remarkable arch opening into the ditch from the lower part of the ſaid tower, which is marked by the letter (i) in fig. XXVI. of his drawings, and mentioned in page 265 of the letter preſs.

As I had viewed the tower from the ditch, and made the drawing of its outſide appearance, which is now ſubmitted to the Society, it occurred to me that the appearances were ſo ſingular as to make a further enquiry and meaſures well worth obtaining. I therefore applied to the Rev. Dr. Gordon, the precentor of the cathedral, who moſt obligingly inſpected the meaſures of the plans which accompany this paper, and added a moſt excellent and accurate deſcription, from which and the ſurveyor's notes the following account was drawn up. The drawing N° 1. pl. LIV. repreſents the outſide appearance of the tower fronting the weſt. A is the great arch no leſs than ſixteen feet wide in the clear, turned with ſtones two feet 1-half inch deep, in

in number forty-five, of no regular thickness, and no stone exactly in the key of the arch. The arch itself, the surveyor says, is ten inches lower than a semicircle; but Dr. Gordon thinks that the difficulty of ascertaining the point of its spring, as there is no impost, may lead to a supposition of its being a real semicircle.

B B, advancing walls which are now ruined so as not to admit of a guess how far they once extended, though they apparently supported a floor or stage of which four joist holes still remain at C: they are 11 by 13 inches and enter 2 feet 6 inches into the wall.

D, a small door having a semicircular arch crossed by a transom stone in the ancient Saxon style. This door, which is 6 feet 6 inches high and only 2 feet 4 ½ inches wide, led from the lower to the advanced stage. Holes, as for bolts, still remain in the jamb of the door, which is now walled up and totally invisible within.

E F, two loop-holes covered with single stones cut circular at the top.

By the line of the present surface of the ground it appears that above eight feet of the original building is now buried, as may be seen in the view drawn by me. In this view also appears a hollow in the rock in front of the tower, and up this there went a flight of steps leading to the great arch, some remains of which were visible about twenty years ago, when the proprietor destroyed them, and in so doing found a singular old spur and a thigh bone of uncommon size, which he buried again.

The workman employed says, that near the bottom of the ditch, something like a room was found with a fire-place and ashes, among which was a piece of iron bigger at one end than

the other, twenty-three inches long and 7 ½ ſquare in the middle.

N° 2. pl. LIV. is a ſection of the building parallel to the weſt front and cloſe to it, in order to give the internal appearance of the arch which is quite ſimilar to the outſide, except that a part of the jambs and vaulting ſtones are covered by a more modern wall on each ſide, ſo as to leave but 8 ½ inches on one ſide, and 10 inches on the other, free. This goes up perpendicular ſmoothly and well wrought as far as can be ſeen for rubbiſh, and was evidently the groove for a portcullis worked in the tower above.

At an interval of 10 inches from the arch ſhewn in the drawing, another is conſtructed of rather leſs diameter but ſemicircular, and ornamented with chamfered mouldings, an impoſt and pillars with a capital, as will be ſhewn at large in the drawing N° 3.

The loops marked on the outſide E are within enlarged to the form expreſſed by the ſame letter in this drawing. It may here be obſerved, that all the referential letters go through the three drawings.

N° 3. is a ſection through the whole tower at right angles to the weſt front; and ſhews diſtinctly the great outward arch, the portcullis groove, and the more modern inner ornamented arch.

The wall of the outward arch is five feet thick, but the ſuperſtructure no more than four.

The portcullis groove is marked F both in this and N° 2. where it appears as a flat wall.

G is the inner arch with its impoſt pillar and mouldings.

H is a ruined wall in which are indications of a vault having gone quite along; and at I are the traces of a projection which probably was a bonding arch though apparently of newer work.

Having

Having now described the present appearance of the tower, it remains to speak of its materials and situation. Its materials are evidently the Lincoln stone, of which a reddish and harder stratum has been selected for turning the arches of both the gate and door above, covering the beam holes and closing the loops. This last stone is precisely the same with that used by the Romans in Newport Gate, and has at first the appearance of grit-stone but is not so.

Its situation is precisely in the line of the Roman wall, and not far from the middle of the west side of it the distances as nearly as can now be measured, being from the north angle of the wall to ditto of the tower 209 yards, and from the south angle to the south side of the tower 161. The difference is 48 yards. The present wall is not of the same date as the tower, being carried up in a strait joint on both sides.

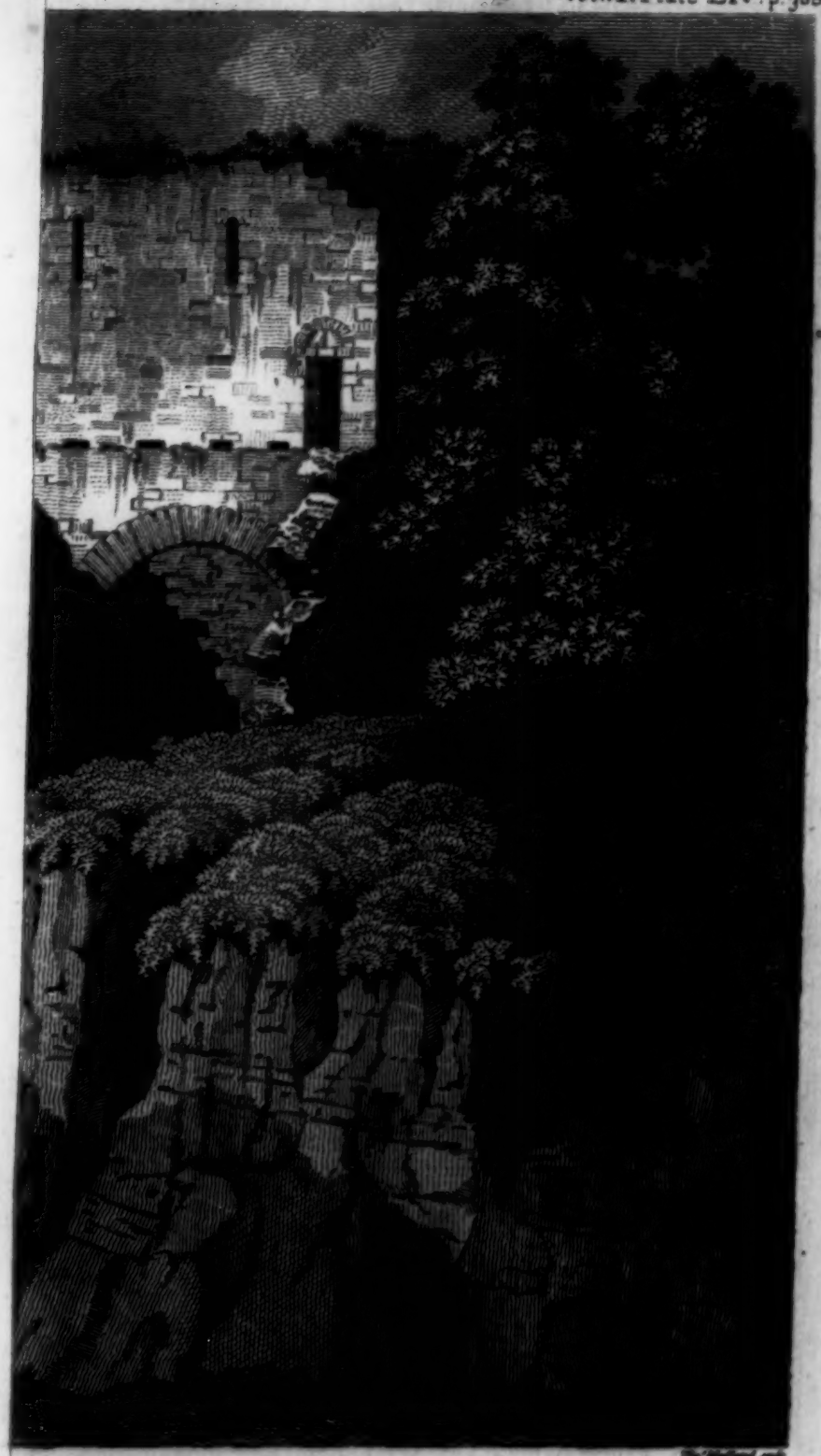
Dr. Gordon says that as near as the eye can judge, this arch is directly opposite to the site of the eastern Roman gate, which was only destroyed about twenty years ago.

Having now finished the description of the tower, both from my own view and the accurate notes of Dr. Gordon; I must add a few remarks on the singularities which occur in the ruin before me. The dimensions of the arch, its materials, its being so far below the present surface of the earth, and its situation in the line of the Roman wall, and opposite the east gate, would at once determine me to pronounce it the old gate of the Lindum of the Romans, did not some remarkable differences in this from the north and south gates still existing seem to discountenance the supposition. They have an impost, this has none. They are built of vast stones, this of rather small ones (though the three thin stones on each haunch of the Newport Roman arch are very like those which turn this arch); yet as the present castle which was built by William the Conqueror

is evidently of more modern time than the tower, and the tower itself appears to have been of a date posterior to the arch in question, as appears by the different thickness of the walls, &c. I cannot help still thinking that the Normans and Saxons both found this great arch built to their hands, and so instead of destroying, turned it into a postern when they dug out the ditch, and built a flight of steps to it. I must end by remarking that the diameter of this arch is much greater than any other gate now about the city, the Newport having been only 15 feet, and the castle great gate 13 feet 10 inches in the clear.

The advancing stage for the defence of the stair-case into the ditch is also as far as I know a singular mode of fortification, and as it seems much like a makeshift to make an unusually constructed gate useful, may also strengthen the idea of its having been constructed long before it was applied to its present destination.

XXIX. *Obser-*



Ancient Gate in Lincoln Castle.

Fig 1

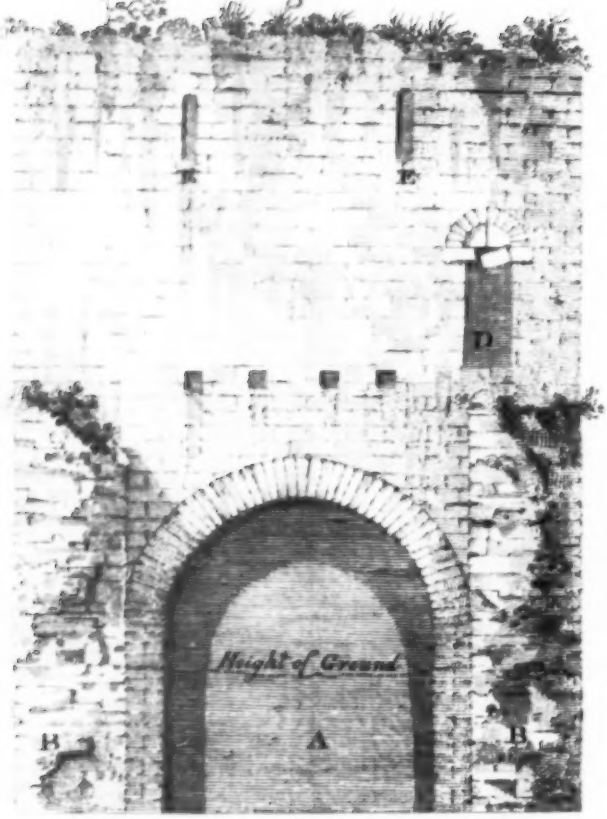
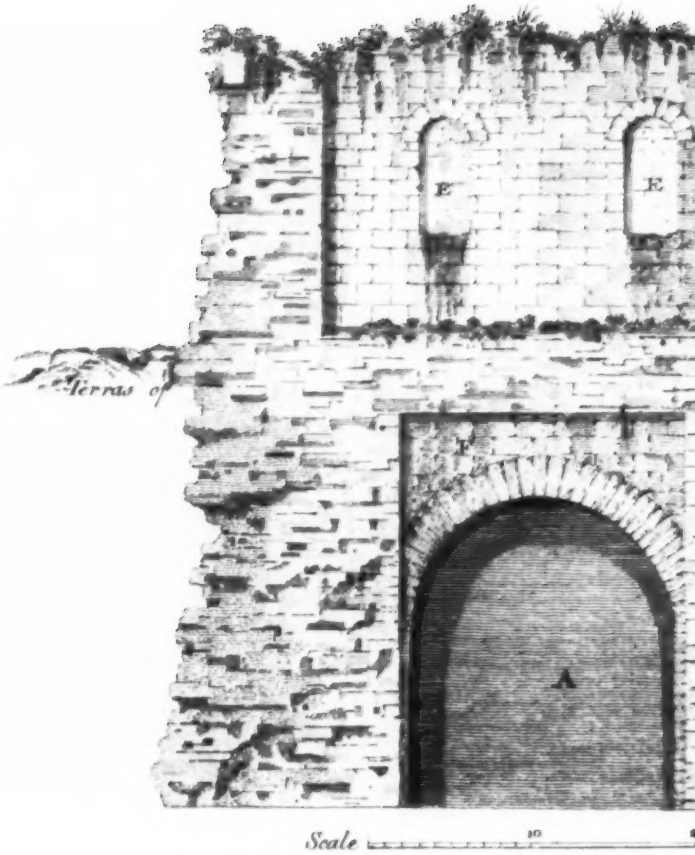


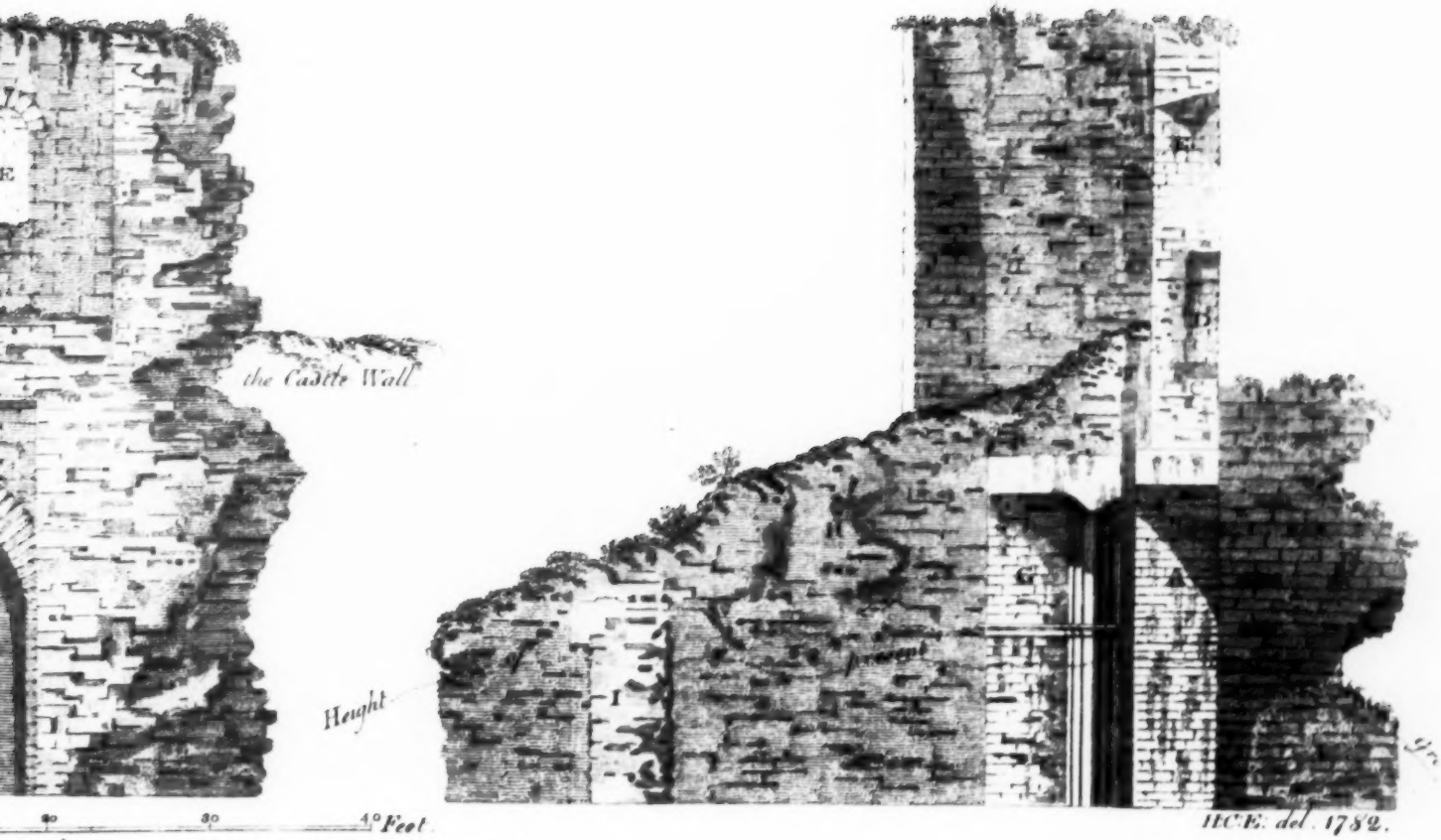
Fig 2



Scale 10

ELEVATION and SECTIONS, of

Fig. 2



. of a Gate in LINCOLN CASTLE.

XXIX. *Observations on* Rochester *Castle, by the Rev. Mr.* Samuel Denne. *In a Letter to Mr.* Gough.

Read May 9, 1782.

SIR,

MR. KING, in his many ingenious and pertinent *Observations on Ancient Castles*, (published in the Archaeologia, vol. VI. art. XXVII.) for the purpose of explaining the conclusions he has drawn from them, has given a full description of Rochester castle, which he remarks was in great part re-edified, if not originally built by Gundulph bishop of that see, about 1088. The justice of this prelate's claim to have been the architect of this venerable fabric is examined in the following disquisition; and, should the paper appear to you to be not unworthy of the attention of the society of which you are a member, by communicating it to that learned and respectable body, you will oblige

Your faithful and humble servant,

SAM. DENNE.

An Enquiry into the truth of the commonly received opinion, that Rochester Castle *was built by* Gundulph *Bishop of that See.*

ROCHESTER castle was the last post of strength of which Odo, bishop of Bayeux, kept possession during the rebellion he had excited against William Rufus. The king, when he be-

ſieged it, was at the head of an army which William of Malmſbury has termed invincible. It was certainly ſo formidable to Odo, and the other mal-contents, that, numerous and powerful as they were, they in a ſhort time capitulated, diſcovering that all reſiſtance would be fruitleſs. As this was a place of very great importance, and as the ſudden ſurrendry of it might have convinced the king that the old fortreſs was not ſo defenſible as had been imagined, he determined to have a new caſtle erected, entirely of ſtone, and Gundulph biſhop of Rocheſter was the perſon he wiſhed to undertake this work. The memorial of this tranſaction is recorded in the Textus Roffenſis, a manuſcript generally allowed to have been compiled by Ernulph, who, after an interval of only ſeven years, was Gundulph's ſucceſſor in the biſhoprick of Rocheſter, and muſt therefore have had ſufficient authority for the truth of his narrative.

IN order to ſave the trouble of turning to the Textus, a copy of the chapter referred to is encloſed; the ſubſtance of which is briefly as follows:

THE church of Rocheſter had for ſome years held the manor of Haddenham in Bucks, it having been a gift to Gundulph from archbiſhop Lanfranc, to whom the firſt William had demiſed it for the term of his own life, and, of courſe, it reverted to the crown on that king's death. His ſon and ſucceſſor required one hundred pounds for renewing the grant; a ſum ſo exorbitant, that the two prelates were amazed at the demand, and with earneſtneſs averred, that neither had they ſo large a ſum of money, nor knew they where to procure it. Two courtiers, who were well inclined to both parties, then ſuggeſted to the king, that as Gundulph was very intelligent and expert in maſonry, his majeſty might be greatly benefited by reſtoring Haddenham to the church of Rocheſter, upon condition, that

 the

the biſhop ſhould, at his own expence, build the caſtle with ſtone. When Henry, earl of Warwick, who was one of the adviſers, communicated this propoſal to Lanfranc and Gundulph, they were ſtill more aſtoniſhed, and peremptorily refuſed to comply with it; aſſigning for a reaſon, that if they acquieſced in theſe terms, the church of Rocheſter, as proprietors of the eſtate, would, in future, become liable to all the repairs of the caſtle; and declaring, that, rather than ſubject their ſucceſſors to the exactions and diſtraints of the king's officers, they wiſhed the manor of Haddenham to be at the bottom of the ſea. The earl, growing temperately warm, expoſtulated with the archbiſhop upon this groundleſs apprehenſion, and aſſured both the prelates, that by gratifying the king in this matter, which might be done for forty pounds at moſt, and by afterwards ſhewing the earl of Kent, or his deputy, or whomever his majeſty might appoint, that the work was properly executed, the biſhop and the church would, in reſpect of this caſtle, be for ever diſcharged from any impoſition, or ſervice. Lanfranc being at length ſatisfied with theſe and the like reaſons, an agreement was accordingly made, in the preſence of the king, that Gundulph ſhould build the caſtle entirely at his own coſt, which Ernulph imagined might amount to ſixty pounds.

LITTLE, if any, doubt can then be made of Gundulph's having erected a caſtle at Rocheſter, and upon a ſpot, ſtyled by Ernulph, in the deed abovementioned, a very beautiful part of the city: and the only queſtion is, whether the keep, or maſter tower (large remains of which are now ſtanding) was what he conſtructed?

To the allowing of him to have been the architect the principal objections are, that he had not time for rearing a fabric ſo ſpacious and lofty—that the money, which, according to

this

this antient MS. he is ſaid to have expended upon this work, was by no means ſufficient to compleat it—and that, though the tower might be begun by Gundulph, there is reaſon to think it was not finiſhed by him, but by Corboyl, archbiſhop of Canterbury.

IT is the opinion of a very experienced workman, that, conſidering the ſtiffneſs of the cement uſed in building the walls of this caſtle, they might, without any danger of bulging, have been worked up in ſeven years at moſt; a circumſtance not duly attended to by thoſe, who have conceived that Gundulph had not time to erect the tower. The capitulation by Odo de Bayeux was made at the end of the year 1088; and archbiſhop Lanfranc, who was one of the parties concerned in the treaty for a new tower, died in June 1089. From the time, therefore, that Gundulph might, and probably did begin to build, to the time of his death, which was on the ſeventh of March 1107-8, there could hardly have been fewer than eighteen years; for it may be well concluded, that both William and Gundulph were ſolicitous to obtain the point each had in view; the King, a ſtrong fortreſs, ſo neceſſary for the ſecurity of his realm, and the prelate the perpetuity of a valuable eſtate to his church.

THE objection to the ſmallneſs of the ſum ſaid to have been expended by the biſhop in building the caſtle, may not be ſo eaſily removed, but it does not ſeem to be inſuperable. What might at the cloſe of the eleventh century be the whole coſt of erecting ſuch a tower cannot be aſcertained with much accuracy; but thus far muſt be granted, that ſixty pounds could not poſſibly have defrayed the whole charge. Is this, however, the clear and preciſe meaning of the words uſed by the writer of the Textus Roffenſis? A different interpretation might be not unreaſonably inferred, from its being higher, by twenty pounds, than

than the imagined eſtimate of the earl of Warwick, who made the propoſal, and will be materially ſtrengthened by the following obſervations.

ROYAL caſtles (and the caſtle of Rocheſter came under that denomination *) were to be erected and repaired at the public expence; it was one of the three neceſſary burdens to which all lands, if not individuals, were ſubject. This was to be diſcharged, either by a proviſion of timber, ſtone, &c. ſuch as the country afforded, or by conveying them to the place where they were to be uſed, or by other perſonal labour; for at that early period, a pecuniary commutation for theſe kind of ſervices was rare. But, when the materials were collected, ſkilful maſons were to be procured, and paid; and not many of theſe properly qualified could have been found among the Engliſh, this branch of building being then almoſt entirely carried on by foreigners.

OUT of the immenſe treaſures, which the firſt William had hoarded up, and left in his palace at Weſtminſter, and which his ſon had not had time to ſquander, he could have born the charge of paying the maſons; but he was of a rapacious diſpoſition, and willing, if he could, to caſt the burden upon another. The one hundred pounds which William Rufus required for the manor of Haddenham, he might intend to have appropriated to this uſe, and this might be his inducement for liſtening to the propoſal of Gundulph's performing the work inſtead of paying the money. Had this charge been defrayed out of the royal treaſury, the king would certainly not have diſpenſed with any of the contributions and ſervices he had a right to demand from his ſubjects; nor does there appear to be any

* In the tenth year of the reign of Henry III. the ſheriff of Kent was commanded to repair the great tower of Rocheſter caſtle. Lambard's Perambulation.

reaſon why the prelate ſhould not have been ſuffered to avail himſelf of the ſame advantages. It was Gundulph's excelling in the art of maſonry that gave riſe to the negotiation between the king and him, which renders it highly probable, that this was the work he ſtipulated to perform; and by the aſſiſtance of the Norman artiſts, and others of the community of maſons, who were then employed by him upon his cathedral and monaſtery, he was enabled to expedite the building of the caſtle. Perhaps, his engagement might include, not only the workmanſhip, but the finding of the comparatively ſmall quantity of the Caen ſtone uſed for the arches and coins. The reader will weigh the plauſibility of this conjecture; and before he decides upon it, let him conſider, whether the ſum, which the right reverend architect is ſuppoſed to have expended in building the caſtle, was not, at that time, ſufficient to anſwer the charge of the foreign ſtone, as well as the maſon's wages. For ſixty pounds, according to the computation of Lord Lyttelton, in his hiſtory of the reign of Henry II. * was equivalent to about nine hundred pounds of our money.

GUNDULPH's having left unfiniſhed the caſtle he had covenanted to build is a notion too haſtily adopted. The inſtrument in the Textus Roffenſis declares the contrary; for it commemorates the biſhop as a benefactor, in having recovered to his church the manor, which was the ſtipulated conſideration, and that clear of all future claims from the crown to repair the caſtle. From the Continuator of Florence of Worceſter † it ſeems likewiſe evident, that it was another fortreſs or tower that was erected by Corboyl, and which Gervaſe ſtyles *egregiam turrim* ‡. A ſurmiſe ſhall therefore be ſuggeſted, whether the keep itſelf was not the work of the biſhop of Rocheſter, and the archbiſhop the builder

* Octavo edit. vol. I. p. 80. and 401. &c.

† P. 503.

‡ Decem Script. col. 1664.

of

of the ſmall abjoining tower; for, as Mr. King has juſtly obſerved, inſtances of large maſſes of ſtone work (though themſelves of a very remote date) in more antient ſtructures are not at all unuſual. Not but that Gundulph, according to the cuſtomary mode of building theſe fortreſſes, might have added a ſmall tower, as a confined and ſecure entrance into the keep, though he did not ſee the neceſſity for one ſo roomy and elegant as what is now ſtanding.

MAY it not, however, be queſtioned, how far the architect of the adjoining tower had that prudent regard to defence and offence which is ſo conſpicuous in the plan of the keep. Mr. King imagines, that the ſpaciouſneſs of the windows in the veſtibule were not, in caſe of a ſiege, of any material diſadvantage. But affording an opportunity to an enemy to make a lodgment ſo near the principal entrance into the great tower, could not be politic, and indeed rendered of leſs importance the drawbridge and the firſt ſtrong gate and portcullis, as the windows of the veſtibule were not out of the reach of ſcaling ladders. Beſides, its having windows, inſtead of loop-holes, would not admit of ſo many of the garriſon's annoying the aſſailants without expoſing themſelves. On both floors of the little tower of admiſſion into the keep of Dover caſtle, there are only loop-holes, which ſeems to be a better contrivance. (Archaeolog. vol. IV. plate XXIV. fig. xvii.)

THE diſpoſition of the loop-holes and windows in the little tower at Rocheſter in an inverted order from that in which they are placed in the great tower, indicates them not to have been planned by the ſame perſon; and any other difference that can be pointed out in the ſtyle of the two buildings will corroborate this notion. A diſſimilarity there was in the arches and frames of the windows of the two towers, if Mr. King is not miſtaken as to the antient plans he has repreſented, both

of thoſe on the principal floor of the keep, and of the upper ſtory, (ſee Archaeolog. vol. IV. plate XXII. fig. vii.) which he judges to have been conſtructed much like thoſe which are left more perfect in Canterbury caſtle. In theſe are ſeen round arches, and cylindrical pilaſters, marks that diſtinguiſh the ſtyle of the earlieſt Norman buildings. The ſame is obſervable in the round-headed doors, and in the arches and maſſive pillars of the ſtate apartments, with zig zag mouldings and ornaments, that bear a ſtriking reſemblance to thoſe in Rocheſter cathedral, which were indiſputably formed under the direction of Gundulph.

LET theſe particulars be laid together;—the clear and poſitive declaration of a contemporary writer, properly authenticated, that this biſhop compleated a caſtle at Rocheſter—his certainly having had time to erect the great tower now remaining—the ſum he is reputed to have ſpent upon this edifice being adequate to the charge of doing that branch of the work, which, by a fair interpretation of the paſſage, was what he had engaged, and was, by his excelling in the knowledge of maſonry, qualified to perform, as alſo a correſpondence, as to the ſtyle and manner of execution, with works confeſſedly his, and after duly conſidering all theſe circumſtances, it will moſt probably be granted, that the doubts of his not being the architect are raiſed upon a weak foundation.

BUT to this accumulated evidence muſt be added the long, and generally received tradition, of the caſtle's having been erected by Gundulph. Mr. Groſe has remarked, that the form of the keep of Rocheſter caſtle is extremely ſimilar to the white tower of London, which, as is mentioned in the Textus Roſſenſis, c. 201. was built under the ſuperintendance of this prelate. And his claim to the credit of this employment, in which he acted merely as a ſurveyor, not having been queſtioned,

much leſs ought he to be deprived of it where the building was erected by him at his own coſt. It is rather to be hoped, that as Rocheſter caſtle has for very near 700 years entailed honour on the name of this illuſtrious architect, ſo it will, whilſt any remains of it ſhall ſubſiſt, continue to be called *Gundulph's Tower.*

Copied from the Textus Roffenſis publiſht by Hearne, p. 145, &c.

cap. 88.

Quomodo Will's rex, filius Willelmi regis, rogatu Lanfranci archiepiſcopi conceſſit et confirmavit Rofenſi eccleſiae Sancti Andreae apoſtoli, ad victum monachorum, manerium nomine Hedenham: quare Gundulfus epiſcopus caſtrum Rofenſe lapideum totum de ſuo proprio regi conſtruxit.

Mem. This title, though printed by Hearne before ch. 87. is, in the MS. prefixed to ch. 88. and inſerted between red lines.

Aliud quoque beatae memoriae Gundulfus epiſcopus non minus memorabile illis contulit beneficium, ſed omni potius omnibus ſeculis venturis dignum veneratione. Caſtrum etenim, quod ſitum eſt in pulchriori parte civitatis Hroueceſtre, pro regia conceſſione illius doni, quod ſepedictus archiepiſcopus praedictae eccleſiae ad victum monachorum diſpoſuerat dare, manerium videlicet quod ſitum eſt in comitatu de Bucingeham nomine Hedenham. Non enim aliter ut ratum permaneret ipſi eccleſiae illud abſque regis conceſſione potuit dare, quia pater regis illud dederat archiepiſcopo in vita ſua tantum, ut ſullimatus fuit in archiepiſcopio. Unde Willielmo filio ejus ipſum patrem ſuccedente in regno, ab archiepiſcopo et epiſcopo de ejuſdem

dem manerii conceſſione requiſitus, reſpondit centum libras denariorum habere ſe velle pro ipſa conceſſione. Quod poſtquam archiepiſcopus et epiſcopus ſimul audierunt, conſternati valde pariter reſponderunt, illam tantam pecuniam neque tunc in promtu ſeſe habere, nec etiam unde eam acquirere potuiſſent ſeſe ſcire. Duobus autem amicis utrique patri * faventibus, Rodberto videlicet filio Haimonis et Henrico comite de Vvarvvic, hinc regium honorem, et integram ejus obſervantibus voluntatem, hinc vero amicitiae favorem et pro Dei amore eccleſiae praedictae magnificum ac profuturum honorem, regi conſulueruntur, quatinus pro pecunia, quam pro conceſſione manerii exigebat, epiſcopus Gundulfus, quia in opere caementarii plurimum ſciens et efficax erat, caſtrum ſibi Hrofenſe lapideum de ſuo conſtrueret. Quod ubi archiepiſcopo et epiſcopo innotuit, tunc proculdubio magis conſternati dixerunt, et regiae conceſſioni ex toto ſeſe abnuere, etiam et ipſum manerium in profundo maris potius ſitum iri malle, quam praedictam eccleſiae Sancti Andreae futuris temporibus regis exactionibus mancipari debere. Nam quotieſcunque quilibet † ex infortunio aliquo caſu in caſtro illo contingeret aut infractione muri aut fiſſura materiei, id protinus ab epiſcopo vel eccleſia uſu reficiendam aſſiduo. Sicque epiſcopus et eccleſia futuri ſaeculi temporibus omnibus ſumma diſtrictione regiae ſubmitteretur exactioni. Iſto itaque metu perterritus uterque, "abſit hoc a me," inquit archiepiſcopus, "abſit "quoque a me," inquit et epiſcopus. Reſponſum hoc audiens comes Henricus, quaſi modeſtae ſtimulis irae commotus, honeſtatis dans concito fremitus, inquit "Hactenus, mea aeſtimatione "ratus ſum archiepiſcopum Lanfrancum unum ex viris univerſi "orbis extitiſſe ſapientiſſimis, nunc autem nec inſipientem, "quod abſit, eſſe dico, neque illa quidem qua dudum ſapientia "callebat, in praeſentiarum vigere ullatenus afferere audeo. Quid

* Sic in orig. i. e. utrique *epiſcopo.* † Sic pro *quolibet.*

"enim

" enim gravedinis," inquit, " in hoc eſt, caſtrum ad ultimum " majus pro xl libris ad voluntatem regis facere, factum vero " comiti vel vicecomiti comitatus, ſeu aliis etiam quibus regi " placuerit monſtrari, monſtratum et ex omni parte integrum " liberare, ſemel vero liberato ſeſe penitus expedire, nec un- " quam alterius inde ſe intromittere, nec etiam eo reſpicere? " Ad hoc regem adverſus epiſcopum vel eccleſiam futurae ſer- " vitutis occaſionem nullatenus quaerere, imo potius eos ab " omni ſervitute liberare, atque ſicut regem decebat, pro Dei " timore, et ſeculi honore, in ſumma libertate eos conſervare " velle." His ergo, et aliis nonnullis hujuſcemodi rationibus, tandem acquievit archiepiſcopus. Igitur hoc pacto coram rege inito, fecit caſtrum Gundulfus epiſcopus de ſuo ex integro totum, conſtamine, ut reor, lx librarum. Quod quamdiu in ſeculo ſubſiſtere poterit, pro Gundulfo epiſcopo manifeſto indicio quaſi loquens erit, aeternum quidem illi ferens teſtimonium, quod manerium Hedenham eccleſiae, et monachis ſancti Andreae, ab omni exactione et calumnia regis, et omnium hominum permanebit liberrimum, et quietiſſimum in ſecula ſeculorum.

XXX. *Governmi-*

XXX. *Governor* Pownall *on* Roman *Earthen-ware, and the Boundary-Stone of* Croyland *Abbey.*

Read April 1782.

SIR,

MR. Brander having entertained me at dinner with a desert served up in Roman earthen-ware out of his cabinet: on my mentioning this to my brother, he gave me the account [which stands in my paper, Archaeol. vol. V. p. 282.] of his having himself dragged up some pieces of Roman earthen-ware from off the *Pudding-pan Sand* or Rock, and showed me the three pieces there referred to, with several fragments of black earthen-ware. On examining them I observed on one the stamp *Attiliani M.* perfect and distinct; on the other, the traces, in the same sort of letters and stamp, of the same name, though not perfect. Whether the black sort ever had any stamp did not appear on the small fragments which I saw. I was led by this circumstance into a train of conjecture (for all that I have written on the subject deserves no better name) *on the things themselves*, and *the place* where they were found: and wrote a little memoire on them. In return to Mr. Brander's civility, I sent this paper to him, with liberty, if he pleased, of communicating it to the Society. At the same time that he communicated this paper in 1778, he exhibited *six specimens* of *his* Roman earthen-ware, said to have been fished up at the mouth of the Thames. A note referring to these pieces, and not to *those* on which

which I wrote, was, without the ſanction of the Society, ſubjoined to this paper as publiſhed in the Archaeologia, vol. V. p. 282. 1779. I had obſerved that the name *Attilianus only* (as far as I could ſee) was on this earthen-ware. The note obſerves *firſt*, that the earthen veſſels *mentioned in this paper* are in the cabinet of Guſtavus Brander, Eſq. *next* gives the ſix ſpecimens of veſſels, referred to in that note, on one only of which appears the name of *Attilianus*. This directly contradicts the fact which I had ſtated as the ground of my conjecture.

THE obſervations I therein made were ſpecifically confined to the *three pieces dragged up by my brother from off the Pudding-pan Sand or Rock*, on which I could make out no other name than *Attilianus*; and I have particularly remarked that the letters of the ſtamp have "a preciſion of form, and a ſharpneſs "and neatneſs of cut equal to the Elziver or Glaſcow letters." Whereas of the ſpecimens exhibited by Mr. Brander, one only is ſtamped with the name Attilianus: three other names or rather *marks of names, with letters not having a preciſion of form*, are on three of them: a defaced and illegible ſtamp on one other; and on another no name, mark, or ſtamp. By thus comparing the paper with the note, the Society muſt ſee, *that theſe earthen veſſels* mentioned in the note, *could not be the earthen veſſels referred to in my paper.*

THE note as it ſtands in the Archaeologia annexed to my paper ſeems to convey a contradiction to the fact which I had ſtated as the ground of my conjecture. But I have now had the ſatisfaction to be aſſured "that no ſuch ſentiment was "meant, or intended to be conveyed, by the making or the "printing of that note: that it was inadvertently inſerted, and "related ſolely to the ſpecimens of Roman pottery produced "at that time by Mr. Brander, and not to the three pieces on

" which I had written my paper." The rectifying this mistake is a piece of justice done me which I acknowledge.

I DESIRE on this occasion to correct likewise *my own* mistakes. I have supposed the Pudding-pan Sand or Rock, which from the fragments of buildings of Roman brick found on it must have been an island, to have been the island *Caunos* mentioned by Ptolemy. I find since, that it was not the island *Caunos*; for that island lies on the Essex coast, under the name *Canue* or *Canvey* of which I was not aware at the time; and which hath also escaped the gentlemen who have commented on my paper, though better acquainted with that country than I am.

THERE is another mistake which I beg may be corrected. At the time I wrote the paper, I had not observed that there were any names on any of the earthen-ware I had seen at Mr. Brander's desert. The observing the name and stamp on that of my brother was what struck me, and gave occasion to my writing the paper. I afterwards learnt from Mr. Brander that there were names stamped on his ware also, and other names than that which I had observed on my brother's earthen-ware. I made a minute of this, and had I known that this paper was to have been published, I should have corrected, what I beg now to correct, the mistake I have been led into in those two passages where I say, " that on these holy vessels *only* one finds the " name of the manufacturer," and again, " that it is not usual " to have the name of the manufacturer on the earthen-ware " of any other kind." The fact turns out that various other names appear on the earthen-ware *found on the Kentish shore between Whitstable and Recalver*, as well as on those of Mr. Brander said to be found *in the same quarter*.

Now as those vessels about which I wrote, and which I suppose to be *holy vessels of the Roman ritual*, were found on the Pudding-pan Sand or Rock *not on the coast* but two leagues

7 off,

off, and have only the name Attilianus on them, the fact which was the ground of my conjecture remains as I ſtated it, and will ſo remain until ſome earthen-ware having other names than Attilianus on them ſhall be found *on that ſpot*, or until any of the earthen-ware which is now in the hands of the curious ſhall be aſcertained to have been found *there*. The moment that that fact is made out, the ground of my conjecture will diſſolve; and the conjecture itſelf be found to be a baſeleſs fabric. I feel little intereſted in its fate, and had rather be convinced of an error than give occaſion to one.

THERE is an *erratum* in the printing of my paper on the ſubject of the granite veſſels found on the Muſquito ſhore. *Turrene* has gotten into the printed copy, in the place of the word *Terrine*, ſignifying an earthen pan, as I wrote it. I beg it may be reſtored to its true orthography on a future edition.

IN another paper which I ventured to lay before the Society, I ſuggeſted a conjecture on what I ſuppoſed to be the true meaning of the Croyland-abbey boundary ſtone. I ſuppoſed this inſcription to be a fragment of one which contained the names of the *Freres* who remained of the *old* abbey of Croyland, at the time when Turketull became abbot and reſtored it. *Clarenbald*, *Swarting* and *Thurgar* remained amidſt the ruins of the old abbey. *Brown* and *Aio* had fled. Upon the reſtoration, Theſe two laſt were recalled. They were wanted to ſettle the rights, title, and boundaries of the old abbey, but eſpecially *Aio* who was *a great lawyer*. The five *Freres* made, with Turketul, a perambulation; and ſettled the Terrier, which Turketul marked by boundary ſtone croſſes. This croſs now remaining I ſuppoſed to be one of theſe, and finding the word *Aio* on it, I did not heſitate to ſay that the word *Aio* is not there the verb ſignifying *I ſay*, but the name of this learned lawyer *Frater* AIO, who was employed in the buſineſs of ſet-

tling these matters. As the stone appeared to me to be the *Frustum* of a cone, I supposed that the upper part which was broken off might have contained the names of the rest of the *Freres* employed in the same business. This conjecture has met with the criticism of a very learned gentleman, who also attacks the facts which I state as the ground of this conjecture; and rather than admit my conjecture seems willing to stick by the *botch verb, Aio, I say.* I will state *the matter of fact* and then withdraw from all further dispute. Fair discussion is the touchstone of truth; but if a Polemic spirit of controversy be once introduced into the society, it will soon pervert every end of its institution.

THE first objection made to my conjecture was, that the *pyramidical shape* of the stone, as given by Dr. Stukeley from whom I copied it, even supposing, what remains, to be a *frustum*, does not give room for the letters of the words and names which I suppose to have preceded that of AIO.

THE same gentleman after supposing from a drawing sent to him, that he had got a *fac simile of the stone*, states first, "that "this stone is in fact a parallelogram." I will suppose that the learned gentleman means a *parellelopipedon.* 2dly, That the stone "is compleat, never having been longer than it is at pre-"sent." And therefore concludes, "that we can be sure there "never were any more letters upon it than those which now "appear."

THIS stone thus squared off at the top in *this supposed fac simile* cuts off at one stroke both my conjecture and the learned gentleman's own ingenious argument drawn from the pyramidical shape. I was told by my friend Mr. Bradley, of Lincoln, that Dr. Stukeley's draught of the stone was nearer the truth, and that Mr. Pegge was mistaken about it. This made me rather anxious to get the fact ascertained. Mr. Bradley recommended

mended me to a very ingenious worthy clergyman living at Spalding, to whom I might refer myſelf for examination of the facts. I took the liberty of troubling this gentleman, and of deſiring him to ſend me an exact meaſurement of the ſtone; of its height; and of the breadth of each ſide or face of it, at the bottom and at the top; alſo to examine the top as to the fact, whether it was or was not compleat and intire, or whether it was apparently a fracture.

THE Rev. MR. SCRIBO has in the moſt obliging manner, though under a ſtate of ill health, made an accurate detailed ſurvey of this ſtone, and the following is his account.

	feet	inches
" Height of the front or weſt ſide from the ma- " ſonry at the baſe - - -	3	1
" Breadth of ditto at the bottom - -	1	4
" Ditto of ditto at the top - -	1	1
" Breadth of the ſouth ſide at bottom -	0	9½
" Ditto of ditto at the top - - -	0	8½
" Breadth of the eaſt ſide at bottom - -	1	3½
" Ditto of ditto at the top - - -	1	1½
" Height of the north ſide from the maſonry at " the baſe - - - - -	2	11½
" Breadth of ditto at the top and bottom -	0	9½

" The ſurface of the top of this ſtone is irregular and bears " manifeſt marks of a fracture, having amongſt others, one " elevation of an inch in height, the corners between the in- " ſcription and the ſouth and north ſides are rounded (and not " angular), from two upright lines cut between each ſide of " the inſcription and the ſaid ſides. The ſouth and eaſt ſides " of this ſtone are plain and level, but the north ſide hath two " upright ridges between two half rounds, by excavations " made from the top to the baſe in the ſtone, ſuch as may be

" obſerved

" obſerved on pillars in churches. The ſtone is erected on " maſonry work of brick and ſtone."

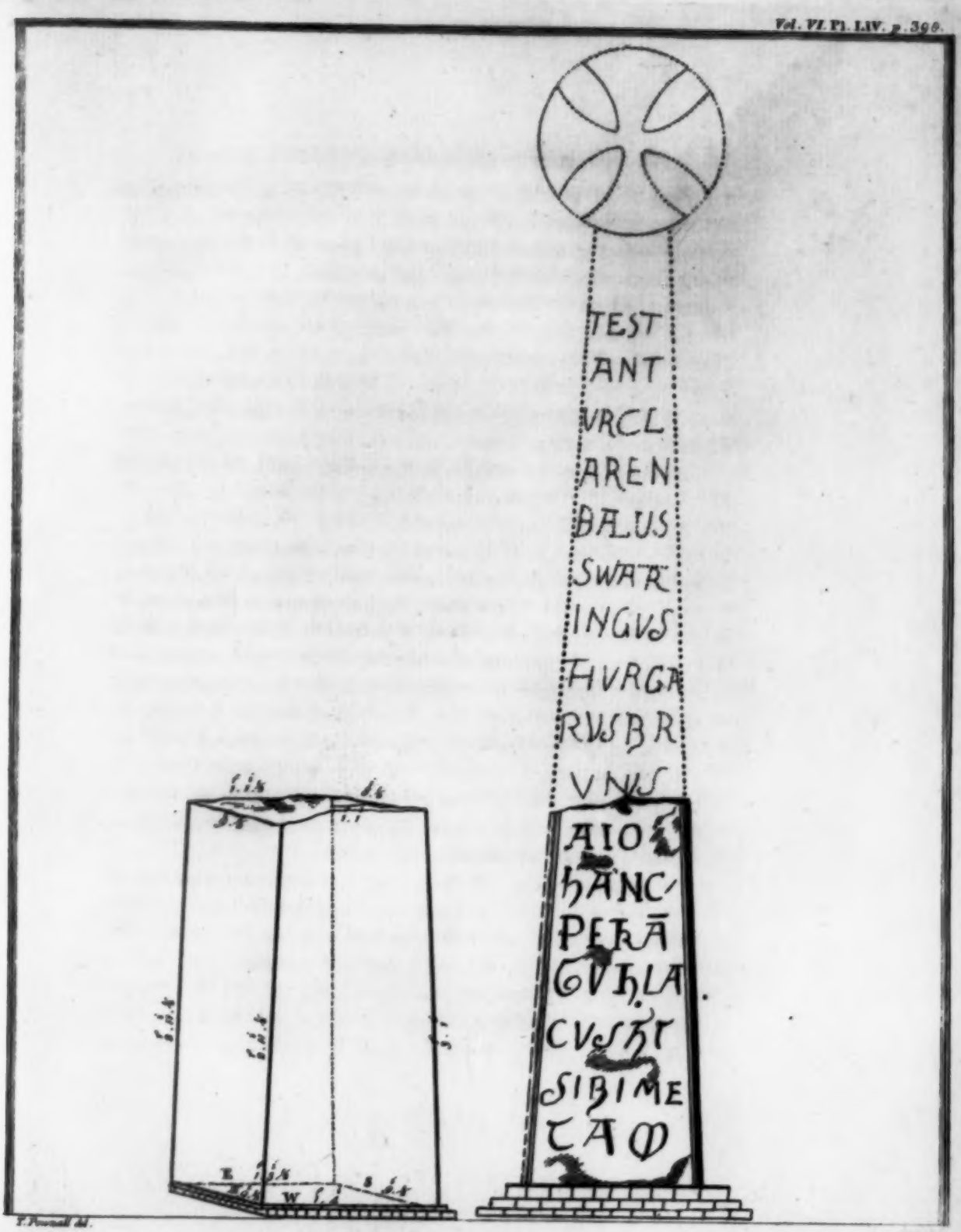
THIS gentleman has alſo ſent me an exact traced copy of the inſcription, which differs from the copies given in Camden and Stukeley, but agrees to the minuteſt ſtroke with that made by Mr. Lloyd, as given in the fifth volume of the Archaeologia. This circumſtance confirms me in an opinion I had formed, namely, that Mr. Lloyd's draught is a *fac-ſimile of the inſcription*, which Mr. Pegge concluded to be a *fac-ſimile of the ſtone*, which proves not to be fact.

THE two lines on each ſide the inſcription are not found in Mr. Lloyd's, but agree exactly with Dr. Stukeley's drawing of the ſtone.

MR. Scribo's account of the top of this ſtone being evidently a *fracture* agrees with the account in Camden, which ſays, " two miles from Crowland *I ſaw the fragment of a pyramid.*" In other matters he differs from Camden, " this boundary-ſtone " (ſays he in his letter to me) ſtands on the right hand ſide of " the bank, not long ſince made a turnpike road, leading from " Croyland to Spalding, near to a houſe now, and in ancient " times, called *Brother-houſe*, at the diſtance of four and not " as Camden reports, of two miles from the former. If Cam- " den erroneouſly copied this inſcription in his travels, it is not " the only error which, I find, he committed in his deſcription " of the pariſh of Crowland."

I HOPE now I ſhall not be thought to preſume too far on the ground of the fact, as aſcertained by Mr. Scribo, reſpecting the ſhape of the ſtone, nor on the ground of reaſoning, if I ſay, that nothing impedes but that there may have been " more " letters upon it than thoſe which now appear" on this *fruſtum*.

LET us next examine from the ſame fact of the ſhape of the ſtone, whether before the top was broken off there was room for



T. Pennell del.

for the letters of the words, or names, which must have been there according to my suggestion of the inscription when compleat. We will refer to the fact as it lies in line and measure. I have made two drawings of this stone, the first is merely to give it in all its proportions; the second gives it as it now remains a frustum, from the fracture at the top of which I have protracted the lines of the sides in pricked lines, so as to give the supposed continuation *. And in order to give in *experimental fact* proof that there was room for the number of letters necessary to compleat the inscription, I have dotted out the letters by their actual scale of size, as Mr. Scribo gives it to me. "The letters are in length from 3 inches to 3 ½ inches."

I OBSERVED that both in Mr. Lloyd's and Mr. Scribo's traced copies, the word AIO has between it and the side of the stone a vacant space. Suspecting that there may have been but now effaced, either joined as thus NE or seperately, the two letters N and E, I have desired Mr. Scribo to examine this stone to this point. If the word should turn out to have been *Aione*, the dispute about it would be ascertained, and the supposed inscription would be *testibus*, with all the names in the ablative case, instead of *testantur* as I have now put it, and would be more in the form of instruments of this nature. With the most perfect respect and esteem for the Society, I have the honor to be their most obedient,

and most humble servant,

T. POWNALL.

* See pl. LVI.

Presents

Prefents to the Society fince the Publication of the laft Volume of the Archaeologia.

The Royal Academy of Sciences at Gottingen.	Novi Commentarii Societatis Regiæ Scientiarum Gottingenfis, tomi I. II. III. IV. V. VI. VII. VIII.
Dr. J. C. Lettfom.	Hiftory of the Origin of Medicine.
Ds. Gerard. Shoening.	Hiftoria Regum Norvegicorum a Snoro Strulæ Filio, nova editio.
A. C. Ducarel, LL. D.	Hiftory of the Royal Abbey of Bec.
E. Turnor, Efq.	Chronological Tables of the High Sheriffs of the County of Lincoln, and of the Knights of the Shire, Citizens, and Burgeffes in Parliament, from the earlieft account to the prefent time.
Mr. John Nichols.	Account of the Alien Priories, and of fuch lands as they hold in England and Wales.
Rev. Dr. Kippis.	Vols. I. and II. of his new edition of the Biographia Britannica.
Sir Ric. Johnfton, Bart. of Guilford, Ireland.	Two Pennies of Edward I. one minted at London, the other at York.
Rev. J. G. King, D. D.	A Crofs-bow found in Flodden Field.
Tho. Pennant, Efq.	His Portrait, engraved by Sherwin.
Will. Warren, M. D.	An Urn, dug up at Sandy in Bedfordfhire.
Hon. D. Barrington.	An old Collection of Englifh Songs in Score.
	A Gold Coin of Conftantius, found near Taunton.
	New Forms of Regifters for Baptifms and Burials.
	A Plan of Dunagoyle Fort, on the Ifle of Bute.

Sir

Gustavus Brander, Esq.	The Form of Cury, from a roll of antient English Cookery compiled about 1390, with an Index and Glossary, by S. Pegge, M. A.
	A Monumental Pillar, with Cufic Characters, brought from Alexandria in Egypt.
	A Mosquito Vase.
Sir Rich. Worsley, Bart.	History of the Isle of Wight.
Jos. Edmondson, Esq.	His complete Body of Heraldry, 2 vols. fol.
Alex. Dalrymple, Esq.	Five Prints of Views upon the Coromandel Coast, and a Map of the East-India Company's Lands on the Coast of Coromandel.
Richard Gough, Esq.	His British Topography, 2 vols, 4to.
Mr. John Nichols.	A new edition of Simon's Medals, Coins, Great Seals, &c.
	A Collection of all the Wills of the Kings and Queens of England, Princes and Princesses of Wales, &c. now known to be extant, &c.
Rev. William Shaw.	His Galic and English Dictionary, 2 vols. 4to.
Mr. Geo. Allan.	Hegg's Legend of St. Cuthbert, a new edition.
J. H. Schlegen of Copenhagen.	Four Islandic volumes with an account of some Books in Cufic Characters, in the Royal Library at Denmark.
	Sagan al Gunlaugi Armstungu ok Skalld-Rafni, sive Gunlaugi Vermilinguis, et Rafnis Poetæ vita Kristni-Saga, sive Historia Religionis Christianæ in Islandiam introductæ, &c.
	Hungurvaka, sive Historia primorum quinque Skalholtensium in Islandia Episcoporum, &c.
	Orkneyinga Saga, sive Historia Orcadensium, a prima Orcadum per Norvegos Occupatione, ad exitum Seculi duodecimi, &c. Descriptio Codicum quorundam Cuficorum, Partes Corani exhibentium, &c.

Mr. Mark Noble.	Two Dissertations upon the Mint and Coins of the Episcopal Palatines of Durham.
The worshipful the Treasurer and Masters of the Bench of the Hon. Society of the Inner Temple.	An engraved View of the Temple as it appeared in the year 1671.
Mr. John Nichols.	N° I. of Bibliotheca Topographica Britannica. Numismatum Romanorum Imperatorum et Imperatricum, omnium Metallorum et Magnitudinum, a Julio Cæsare ad Heraclium Aug. Series et Valor, a R. Gale, Armigero.
J. T. Dillon, Esq.	His Travels through Spain.
Don Ant. Ponz.	The 7th and 8th vols. of his Viage de Espana.
Rev. Dr. Nash.	His Collections for the History of Worcestershire, in two volumes, folio.
Rev. Dr. Morell.	Six MSS. 1. Æneas Silvius' History of Bohemia. 2. Lombardelli's Oration on the Origin of the Tuscan Language. 3. State of the Revenue of France, Normandy, &c. for 1 year, during the Regency of John Duke of Bedford. 4. Report of sundry memorable accidents befalling Dan. Archdeacon (an Italian fencing master) before and after the combat appointed between him and Thomas Mowbray (a Scotsman), A°. 1599. 5. Catalogue of the Nobility of England; and a List of the King's Courts of Record, his Houshold, Castles, &c. A°. 1616. 6. The Lives of the Roman Emperors from Julius Cæsar to Carolus V. the 121st Emperor, 1519; with the most memorable occurrences in their several reigns; by Sebast. Frank.
Rev. J. Bowle.	His edition, in Spanish, of Don Quixote, 6 tomes.

Rev.

Rev. Dr. Swinney.	Six vols. of Kollarius's edition of the works of Lambecius.
John Wightwick, Esq.	A Mezzotinto Print of Thomas Browne, Esq. Garter Principal King at Arms.
Fran. Carter, Esq.	His Portrait, engraved by Basire.
Sir James Burrow, Knt.	His Portrait, engraved by Basire.
Sir W. Chambers, Knt.	Two small Roman Earthen Lamps.
Count Wilseck.	Five different Views of the *Furcæ Caudinæ.*
Rev. J. G. King, D. D.	A Drawing, copied from an old painting, exhibiting a view of Greenwich, the Park, and the old Palace.
Dr. Roberts.	An Etching, by Green, of the S. W. prospect of Gifford's Hall, Suffolk.
Hon. D. Barrington.	Duplicate of the Taxes paid for Marriages, Births, and Burials, and upon Batchelors and Widowers, in Cirencester Hundred, in the county of Gloucester.
	A Poem, intitled, *Archerie revived,* or the *Bowman's Excellence,* by R. Shotten and R. Durfey, 1676.
Gov. Pownall.	A Map and Topographical Description of the Middle Colonies of North America.
O. Salusbury Brereton, Esq.	Bishop King's Sermon at St. Paul's Cross, before K. James I. &c. A°. 1620.
The Imperial and Royal Academy of Sciences, &c. at Bruxells.	The 2d and 3d vols. of their Memoirs; and Prize Pieces for the year 1779.
The Rev. Dean Milles.	His edition of Rowley's Poems.
Sir W. Hamilton, K. B.	The Supplement to *Campi Phlegræi.*
Cha. Rogers, Esq.	The *Inferno* of Dante, translated into English.
Will. Jones, Esq.	The Mahomedan Law of Succession to the Property of Intestates.
Mr. John Carter.	An etched Print of some Antiquities in Westminster Hall. The first, second and third sets of his engravings from ancient Sculpture and Paintings.

Rev.

Rev. Tho. Warton.	His Specimen of a Parochial History of Oxfordshire: *Kiddington.*
Samuel Pegge, Esq.	The first part of his *Curialia*; viz. on the obsolete Office of the Esquires of the King's Body; and on the original Nature, Duty, &c. of the Gentlemen of the King's most honourable Privy Chamber.
Ralph Willett, Esq.	An engraved Print of an ancient Deer-hunter.
Gabriel Lancilotto Castello, Prince of Torremuzza in Sicily.	Siciliæ Populorum, et Urbium, Regum quoque et Tyrannorum, Veteres Nummi, Saracenorum Epocham antecedentes.
Mr. John Nichols.	Biographical and Literary Anecdotes of William Bowyer, Printer, F. S. A. and of many of his learned Friends, &c.

INDEX.

INDEX.

A

B

Bevium,

Durham

Rochester

Urns,

DIRECTIONS

Directions to the Bookbinder.

XXXII.

Directions to the Bookbinder.

ERRATA.

Page.	Line.	
86	3	*for* Walton *read* Fletcher.
117	5	*for* Luxon' *read* Luxor'.
208	2	*read* Mr. Kerrich fellow of that college.
		Plates LIV. and LV. not being delivered till after the volume was printed;
376	14	after *Society* add an asterisk referring to *Pl. LIV.* below, and in line 21 read *Pl. LV.*

WORKS published by the SOCIETY OF ANTIQUARIES.

VETUSTA Monumenta, quae ad Rerum Britannicarum Memoriam conservandam Societas Tabulis 105 aeneis incidi curavit; cum Explicationibus necessariis. Folio. Price in Sheets 7 *l.*

The Plates may also be had separately.

Tables of English Silver and Gold Coins, from the Norman Conquest to the present Time; illustrated with 67 Copper Plates; together with the Weights, intrinsic Values of, and Remarks upon, the several Pieces. Quarto. Price in Sheets 2 *l.* 2 *s.*

Five Dissertations. Quarto. Price 7 *s.* *videlicet*,

One on Domesday Book, } By P. C. Webb, Esquire.
One on Danegeld, }
Two on the Heraclean Table, by Mr. Webb and Dr. Pettingal.
One on the *Tascia*, by Dr. Pettingal.

Archaeologia, or Miscellaneous Tracts relating to Antiquity; in Five Volumes Quarto. Price in Sheets 5 *l.* 15 *s.*

These may also be had separately; *videlicet*,

Vol. I. 15 *s.*
Vol. II. 15 *s.*
Vol. III. 18 *s.*
Vol. IV. 1 *l.* 1 *s.*
Vol. V. 1 *l.* 1 *s.*
Vol. VI. 1 *l.* 5 *s.*

Print of *Le Champ de Drap d'Or*, or the Royal Interview of Henry VIII. and Francis I. between *Guînes* and *Ardres*, in the Year 1520; with an Historical Description thereof in Letter Press. Price 2 *l.* 2 *s.*

Print of Francis Ist's Attempt to invade England, Anno 1544; from an Historical Painting at Cowdry in Sussex, with a Description in Letter-Press. Price 1 *l.* 5 *s.*

Print of the Embarkation of King Henry VIII. at Dover, May 31, 1520, preparatory to his interview with the French King Francis I. from the original picture 12 feet and 1 inch in length, and 6 feet 5 inches in height, preserved in the royal apartments in Windsor Castle, with an historical description. Price 1 *l.* 11 *s.* 6 *d.*

A CATALOGUE of PRINTS

INGRAVED AND PUBLISHED BY THE

SOCIETY of ANTIQUARIES of LONDON.

VOLUME I.

Numb.		Price. l.	s.	d.
	THE general Title and Catalogue in Latin.	0	1	0
1.	A brafs Lamp, found at St. Leonard's hill near Windfor.	0	1	0
2.	Ulphus's Horn, preferved in the cathedral at York.	0	1	0
3.	The Font in St. James's church, Weftminfter.	0	1	0
4.	The portrait of King Richard II. from an ancient picture lately in the choir of Weftminfter abbey.	0	2	0
5.	Three ancient Seals, with their reverfes; the firft of Cottingham abbey in Yorkfhire; the fecond of Clare hall in Cambridge; and the third the chapter-feal of the church of St. Etheldred at Ely.	0	1	0
6.	The ruins of Walfingham priory, in Norfolk.	0	0	9
7.	Waltham Crofs.	0	1	0
8.	A Plan of the remaining walls and city of Verulam.	0	1	0
9—12.	Four views of the ruins of Fountain abbey, in Yorkfhire.	0	3	0
13, 14.	Three views of the gate of St. Bennet's abbey at Holm, in Norfolk.	0	2	6
15.	The tomb of Robert Colles and Cecily his wif, at Foulfham in Norfolk.	0	0	6
16.	The Shrine of King Edward the Confeffor in Weftminfter abbey.	0	2	0
17.	The North front of the gate at Whitehall.	0	1	0
18.	The North front of King's ftreet gate in Weftminfter.	0	1	0
19.	Plans of the two preceding gates.	0	0	6
		1	0	3

Numb.		Price. l.	s.	d.
	Brought over	1	0	3
20.	Coins of K. Henry VIII. Edward VI. Q. Elizabeth, and K. James I. Alſo a portait of Q. Elizabeth, from a painting in enamel.	0	1	0
21—26.	The Tournament of K. Henry VIII. Feb. 12, 1510; from an ancient roll in the Herald's office.	0	6	0
27.	The ruins of Furneſs abbey, in Lancaſhire.	0	1	6
28—33.	The Barons' Letter in the reign of K. Edward I. Feb. 12, 1300, to Pope Boniface VIII; with the ſeals appendent.	0	6	0
34.	An antique braſs head dug up at Bath in 1727.	0	1	0
35, 36.	Three views of Colcheſter caſtle in Eſſex, with the Ground-Plot.	0	2	0
37, 38.	Tables of Engliſh gold and ſilver coins, ſhewing the ſeveral ſpecies coined in each reign.	0	3	0
39.	Tutbury caſtle, in Staffordſhire.	0	1	0
40.	Melborn caſtle, in Derbyſhire.	0	1	0
41.	Lancaſter caſtle.	0	1	0
42.	Pontefract caſtle, in Yorkſhire.	0	1	0
43.	A gold Seal of Pope Alexander IV; with gold and ſilver coins ſtruck in France and Flanders, relating to the hiſtory of England.	0	1	0
44.	Knaresborough caſtle, in Yorkſhire.	0	1	0
45.	A Portrait of Dr. Tanner, Bp. of St. Aſaph.	0	1	0
46.	Tickhill caſtle, in Yorkſhire.	0	1	0
47.	A Plan of the Roman roads in Yorkſhire.	0	1	0
48.	A Roman teſſellated Pavement, found near Cotterſtock in Northamptonſhire, 1736.	0	1	6
49.	An ancient Chapel adjoining to the Biſhop's Palace at Hereford.	0	1	0
50—52.	Three Roman teſſellated Pavements, found at Wellow near Bath 1737.	0	5	0
53, 54.	Ancient Seals and their reverſes, from the Dutchy-office of Lancaſter.	0	2	6
55.	Gold and ſilver Medals of Mary Queen of Scots, and Lord Darnley; with others of Queen Anne, Prince Henry, and K. Charles I.	0	1	3
56.	Gold and ſilver Coins of ſeveral Engliſh Kings, Prince Edward, and Q. Elizabeth.	0	1	3
		3	2	3

Numb.		Price. l.	s.	d.
	Brought over	3	2	3
57.	A Roman Sudatory found at Lincoln.	0	1	0
58—60.	Ancient Seals, from the Dutchy-office of Lancaſter.	0	4	6
61.	Wincheſter Croſs.	0	1	0
62.	The Decree of the Univerſity of Oxford in 1534, againſt the juriſdiction of the Pope in England.	0	2	6
63.	A Plan of the Tower Liberties, from a ſurvey in 1597.	0	2	0
64.	Chicheſter Croſs.	0	1	0
65.	Three views of the Roman *Retiarii*.	0	1	0
66—68.	The Portrait of Sir Robert Cotton, Bart. with two plates of Fragments of an ancient MS. of the Book of Geneſis, illuminated with elegant figures; and an hiſtorical Diſſertation thereon.	0	5	0
69.	The Standard of ancient Weights and Meaſures, from a Table in the Exchequer.	0	2	6
70.	A view of the Court of Wards and Liveries, as ſitting; with a brief hiſtorical account of that Court.	0	5	0
	Total	4	7	9

N. B. This FIRST VOLUME may be had together for *four pounds*.

VOLUME II.

Numb.		Price. l.	s.	d.
1—2.	PLANS for rebuilding the City of London after the great fire, in 1666.	0	2	0
3.	A Portrait of Mr. Holmes, keeper of the Records in the Tower.	0	1	0
4.	Ancient Deeds and Seals.	0	1	0
5.	A view of the Savoy from the River Thames.	0	1	0
6.	The Warrant for beheading K. Charles I.	0	1	6
7.	An ancient wooden Church at Greensted in Essex; the Shrine of St. Edmund the King and Martyr; and the Seal of the Abbot of St. Edmund's Bury in Suffolk.	0	1	0
8.	Glocester Cross.	0	1	0
9.	Three tessellated Roman Pavements, found at Winterton in Lincolnshire, 1747; with one at Roxby, in that neighbourhood.	0	2	0
10.	Doncaster Cross.	0	1	0
11.	Sandal castle in Yorkshire.	0	1	0
12.	The Savoy Hospital in the Strand, with the Chapel.	0	1	0
13.	Clithero castle in Lancashire.	0	1	0
14.	A Plan of the ground and buildings of the Savoy.	0	1	0
15—16.	A view of the cathedral church and Priory of Benedictines at Canterbury, with the effigies of Eadwin, a monk of that convent, between the years 1130 and 1174, both drawn by himself; with a printed account of the said drawings.	0	3	0
17.	An ancient Lamp in two views; a Vase, and two Bells, all of brass.	0	1	0
18.	Silenus and a Lamp.	0	1	0
19.	Third seal of Canterbury Cathedral, and a Mantle-piece at Saffron Walden.	0	1	6
20.	Brass Trumpets, and other instruments found in Ireland; and a shield found at Hendinas in Shropshire; with an explanatory account.	0	2	0
21—22.	An antique bronze figure, from the collection of the late Mr. Hollis, with an explanation.	0	5	0
23—24.	Two views of the old Palace at Richmond; with an account thereof.	0	5	0
		1	14	0

Numb.		Price. s.	d.
	Brought over	1 14	0
25.	View of the Palace of Placentia at Greenwich; with an account thereof.	0 2	6
26.	The East window of St. Margaret's Westminster.	0 5	0
27.	View of the old Palace at Hampton Court; with an account thereof.	0 4	0
28.	Portrait of Dr. Lyttelton, Bp. of Carlisle, mezzotinto.	0 5	0

Seven plates of ancient monuments in Westminster Abbey, viz.

29.	Front of the monument of Aveline Countess of Lancaster.	0 10	6
30.	The cumbent figure of Aveline.		
31.	The undervaulting and ornaments of the tomb.		
32.	The North front of K. Sebert's monument.		
33.	The figures of Sebert and Henry III.		
34.	Heads and ornaments on Sebert's monument.		
35.	The tomb of Anne of Cleves.		
	Total	3 1	0

All the Numbers of this SECOND VOLUME may be had together for *three pounds*.

Prints engraved by the late Mr. GEORGE VERTUE, now the property of the SOCIETY of ANTIQUARIES.

	Price. l.	s.	d.
A plan of London in Q. Elizabeth's time, copied by Mr. Vertue 1748, in 8 plates.	0	6	0
The first sett of Mr. Vertue's historic prints, consisting of four plates, with descriptions.			
Henry VII. and his Queen; Henry VIII. and Lady Jane Seymour.			
Procession of Q. Elizabeth to Hunsdon house.			
The Cenotaph of Lord Darnley; with James I. when a child, and the Earl and Countess of Lenox, &c. praying by it.	1	3	6
The battle of Carberry Hill at large.			

	Price. l.	s.	d.
The second sett, consisting of the five following prints.			
Three children of Henry VII. Charles Brandon Duke of Suffolk, and Mary Queen of France. Frances Dutchess of Suffolk, and Adrian Stoke, her second husband. Lady Jane Grey. K. Edward VI. granting the Palace of Bridewell for an Hospital.	1	3	6
Charles I. and his Queen.	0	5	0
Plan and elevation of the Minor Canons' houses at Windsor.	0	1	0
Lincoln's Inn chapel, with the Ambulatory.	0	2	6
Plan of Whitehall.	0	2	0
Chichester Cross.	0	2	0
Portrait of Sir John Hawkwood.	0	1	6
Le Champ de Drap d'Or; or the interview of K. Henry VIII. and Francis I. between Guines and Ardres, 1520; from an original painting at Windsor, with an historical account.	2	2	0
The incampment of the English forces near Portsmouth, together with a view of the English and French fleets at the commencement of the action between them July 19, 1545, from an original painting at Cowdry, with an historical account.	1	5	0
The Embarkation of King Henry VIII. at Dover, May 31, 1520, preparatory to his interview with the French King Francis I. from the original picture 12 feet and 1 inch in length, and 6 feet 5 inches in height, preserved in the royal apartments in Windsor Castle, with an historical description.	1	11	6